4/7

L200

Department of Water and Power the City of Los Angeles

May 25, 2005

Ms. Renee Klimczak
President
BHP Billiton LNG International
1360 Post Oak Boulevard, Suite 150
Houston, TX 77056-3020

Dear Ms. Klimczak:

Re: Letter of Interest – Los Angeles Department of Water and Power

Thank you for approaching the Los Angeles Department of Water and Power to discuss our future natural gas needs. LADWP is the largest municipal utility in the nation serving over 3.9 million customers. As you know, LADWP is a major consumer of natural gas in California and our annual consumption of natural gas at our facilities totals approximately 61 billion cubic feet. We, like all major California natural gas consumers, are beginning to see the impacts of abrupt and significant rise in natural gas prices, the reduction in the number of potential suppliers, as well as the decline in sources of natural gas supply.

We agree that liquefied natural gas imported to California can provide a reasonable alternative to the natural gas market crisis which is quickly evolving. We have followed your LNG project, as well as the other proposed projects, and we fully support efforts to bring LNG to California as soon as possible.

While we recognize that you are not in a project phase to sell and we are not in a position to purchase supplies from BHP Billiton, we are committed to discuss and, when BHP Billiton is ready, to negotiate in good faith with you for supplies from your Cabrillo

111 North Hope Street, Los Angeles, California 90012-2607 *Mailing address:* Box 51111, Los Angeles 90051-5700
Telephone: (213) 367-4211 *Cable address:* DEWAPOLA

L200-1
Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

Port facility, or, we will include your supplies from Cabrillo Port in our future long-term requests for proposals for natural gas supplies.

Sincerely,

Randy S. Howard
Executive Assistant to the Chief Operating Officer – Power System

RSH:dw

L222

JENKINS & HOGIN, LLP
A LAW PARTNERSHIP

MICHAEL JENKINS
CHRISTI HOGIN
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CHOGIN@LOCALGOVLAW.COM

June 2, 2006

Mr. Dwight Sanders
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: Revised Draft Environmental Impact Report for the Cabrillo Port LNG Natural Gas Deepwater Port (State Clearinghouse #2004021107)

Dear Mr. Sanders:

I write to inform you that the City of Malibu hereby joins in the written comments on the Draft Environmental Impact Report for the Cabrillo Port LNG Natural Gas Deepwater Port submitted by the Environmental Defense Center and dated May 11, 2006. L222-1

Very truly yours,

Christi Hogin
City Attorney

L222-1
See the responses to the Environmental Defense Center letter dated May 11, 2006 (2006 Comment Letter G207).

EDMUND F. SOTELO
City Manager

CITY MANAGER'S OFFICE
305 West Third Street • Oxnard, CA 93030 • (805) 385-7430 • Fax (805) 385-7595

L201

April 18, 2006

Dwight E. Sanders
California State Lands Commission
Division of Environmental Planning and Management
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

Subject: Revised Draft Environmental Impact Report for the Cabrillo Port Liquefied Natural Gas Deepwater Port
Docket No. USCG 2004-16877
California State Clearinghouse No. 2004021107

Dear Mr. Sanders:

I want to start by expressing my appreciation to you and your agency for providing the community with the opportunity to comment on the revised draft environmental impact report (EIR) relating to BHP Billiton's proposed deepwater port project off the coast of Oxnard.

On April 18, 2006, the City Council of the City of Oxnard, during a regularly scheduled City Council meeting, decided to execute a letter to the California State Lands Commission communicating the City's official comments relating to the revised draft EIR. It is my understanding that Mr. Dennis Scala of my office personally delivered the letter to you at the public hearing held in Oxnard on April 19, 2006. Additionally, our Mayor, Dr. Thomas Holden, personally read the letter into the record during the public hearing held last evening. The letter constituted the official response from the City of Oxnard relating to the revised EIR.

It is also my understanding that Mr. Chris Williamson, a member of our planning department, also offered public comment as to the impact the location of the proposed land based pipeline might have on the City's ability to address future land use issues. Although the opinions Mr. Williamson expressed at the meeting may be valid concerns from a City planning perspective, they were not considered by the City Council and, therefore, cannot be considered as official comments from the City of Oxnard. The City Council, as the legislative body of the City, is solely empowered to express comments and opinions relating to the proposed project on behalf of the City of Oxnard.

As a result, I am requesting that you not consider the comments offered by Mr. Williamson as official comments from the City of Oxnard. Should the City wish to express these comments to you, we will transmit them to in the form of a letter from the City Council of the City of Oxnard between now and May 12, 2006.

Thanks again for all of the consideration you have shown our community.

Very truly,

Edmund F. Sotelo
City Manager

L201-1

L201-1
Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

L219

23920 Valencia Blvd.
Suite 300
Santa Clarita
California 91355-2196
Website: www.santa-clarita.com

Phone
(661) 259-2489
Fax
(661) 259-8125

City of Santa Clarita

May 4, 2006

Mr. Dwight E. Sanders
California State Lands Commission
Division of Environmental Planning and Management
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: Revised Draft EIR for the Cabrillo Port LNG Deepwater Port

Dear Mr. Sanders:

Thank you for providing the City with the opportunity to review the Revised Draft EIR for the Cabrillo Port Liquefied Natural Gas Deepwater Port, including the floating storage and regasification unit (FSRU) and the Line 225 Pipeline Loop in Santa Clarita. The focus of our review has been on the portion of the project that is inside the City of Santa Clarita.

We thank the State Lands Commission for its consideration of our comments on the Draft EIR/EIS for the project submitted December 20, 2004 and find the current document has addressed many of our concerns expressed in that letter. The document now contains the findings of surveys for the following biological resource studies conducted after publication of the original 2004 Draft EIR/EIS:

We are pleased that the revised Draft EIR addresses the vast majority of the concerns cited in our previous letter. The remaining concerns are below.

Remaining Concerns

After reviewing the much improved Draft EIR, we do however, have the following concerns:

- This revised document should be a revised EIR/EIS, not simply a revised EIR. Separation of the two processes will complicate agency and public review and the ultimate processing of the documents. L219-1

- Any failure under MM TerBio-2g to replace oak trees in compliance with ratios specified in the City's Oak Tree Ordinance would be a significant unmitigated impact of the project. It may be useful to specify in this mitigation that at a minimum Oak Tree replacement will occur at ratios specified in the applicable local jurisdiction's ordinance. L219-2

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2006/L219

L219-1
A Revised Draft EIR was recirculated in March 2006 under the CEQA for an additional public review period of 60 days. Sections 1.4 and 1.5.3.2 contain additional information on this process. The USCG and MARAD determined that recirculation of the Draft EIS was not necessary to meet the requirements of NEPA and other applicable Federal regulations. Nonetheless, the USCG, MARAD, and the CSLC have considered all comments received on the Revised Draft EIR and have cooperated in the preparation of this joint Final EIS/EIR.

L219-2
MM TerrBio-2g in Section 4.8.4 has been revised in response to the comment.

L219-3
MM HAZ-3a in Section 4.12.4 has been revised in response to the comment.

Finally, we would ask that the City of Santa Clarita be copied or involved in any consultation with DTSC regarding the Whittaker/Bermite site. L219-3

Again, thank you for the opportunity to comment on the EIR. If you have any questions please feel free to contact either me or Kai Luoma, Senior Planner, at (661) 255-4330.

Sincerely,

Kai Luoma, AICP
Senior Planner

KL:lep
S:\CD\CURRENT\County Monitoring\LNG pipeline\LNG Pipe EIR comments #2.doc

cc: Kenneth R. Pulskamp, City Manager
Ken Striplin, Assistant City Manager
Robert Newman, Director of Public Works
Darren Hernandez, Director of Administrative Services
Lisa Hardy, AICP, Planning Manager
Mike Murphy, Intergovernmental Relations Officer
Gail Ortiz, Public Information Officer
Kai Luoma, AICP, Senior Planner
Susan O'Carroll, Environmental Consultant
State Senator Tom McClintock
State Senator George Runner
State Assembly Member Keith Richman, M.D.
Cheryl Karpowicz. Ecology and Environment, Inc.

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

James E. Hartl AICP
Director of Planning

April 25, 2006

Dwight E. Sanders
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

**SUBJECT: Revised Draft Environmental Impact Report (RDEIR)
For the Cabrillo Port Liquefied Natural Gas Deepwater Port**

Dear Mr. Sanders:

The County of Los Angeles appreciates the opportunity to comment on the Revised Draft EIR for the Cabrillo Port Liquefied Natural Gas Deepwater Port, March 2006 (RDEIR). The proposed project is a new offshore, deepwater liquefied natural gas floating storage and regasification unit to be anchored about 12 nautical miles off the coast of Ventura and Los Angeles Counties. In addition, new offshore and onshore pipelines and related facilities are proposed. Natural gas distribution will utilize the existing Southern California Gas Company interstate pipeline system with the exception of the new pipelines in the City of Oxnard and the City of Santa Clarita.

It appears that the implementation of the proposed project would not require any regulatory permitting through the jurisdiction of Los Angeles County, although some new pipeline installation would occur within the geographic boundaries of the County. However, the County of Los Angeles is still concerned about the potential hazards posed by the proposed project. To address the concerns raised in regard to public safety, the RDEIR contains an Independent Risk Assessment (IRA) that was prepared in order to postulate a worst-case scenario accident. This analysis calculates that no direct mainland impacts would arise from any accident at the offshore facility. Several mitigation measures are proposed to minimize impacts to public safety, however, significant impacts are still likely, largely as a consequence of the flammable nature of natural gas. L001-1 L001-2

The County is also concerned about the potential impacts to visual resources. The RDEIR analysis indicates that there should be no impact to onshore recreational uses but the proposed offshore facility would change the character of the ocean environment for recreational boat users for which no mitigation measure is considered to be feasible. L001-3

Natural gas is a relatively clean energy source and it is likely to become increasingly more important to the residents of California. Local sources for natural gas are being depleted and new sources are needed to maintain the current level of service. The proposed project should be required to implement all the mitigation measures listed in the RDEIR and all appropriate regulatory compliance must be enforced in order to minimize potential impacts to public safety. L001-4

320 West Temple Street ▪ Los Angeles, CA 90012 ▪ 213-974-6411 ▪ Fax: 213-626-0434 ▪ TDD: 213-617-2292

L001-1
Thank you for the information.

L001-2
The lead agencies directed preparation of the Independent Risk Assessment (IRA), and the U.S. Department of Energy's Sandia National Laboratories independently reviewed it, as discussed in Section 4.2 and Appendix C. Section 4.2.7.6 and the IRA (Appendix C1) discuss the models and assumptions used and the verification process. Sandia National Laboratories (Appendix C2) concluded that the models used were appropriate and produced valid results.

The IRA defines and evaluates representative worst credible cases (scenarios of events that would lead to the most serious potential impacts on public safety). These included accidents that would affect one, two, or all three tanks of the FSRU. As shown in Tables 4.2-1, 4.2-2, 4.2-7, and 4.2-8, the release of the contents of all three tanks (the entire contents of the FSRU and an attending LNG carrier) is addressed in the escalation scenario associated with a large intentional event. Although the 2006 Sandia National Laboratories third-party technical review of the 2004 IRA found that the three-tank simultaneous release (a massive LNG release in a short time period) was not credible, Sandia recommended the consideration of a cascading (escalation) three-tank scenario.

The IRA evaluates the consequences of a potential vapor cloud (flash) fire, as discussed in Section 4.2.7.6 and the IRA. The IRA determined that the consequences of the worst credible accident involving a vapor cloud fire would be more than 5.7 NM from shore at the closest point, as summarized in Table 4.2-1. Figure 2.1-2, Consequence Distances Surrounding the FSRU Location for Worst Credible Events, depicts the maximum distance from the FSRU in any direction that could be affected in the event of an accident. The shape and direction of the affected area within the circle depicted in Figure 2.1-2 would depend on wind conditions and would be more like a cone than a circle, but would not reach the shoreline.

The EIS/EIR identifies unavoidable significant (Class I) impacts. The Administrator of MARAD under the authority of the Deepwater Port Act, the California State Lands Commission, and the Governor of California have to balance the benefits of the Project against its unavoidable environmental risks. In accordance with Section 15093 of the State CEQA Guidelines, the CSLC would have to make a Statement of Overriding Considerations addressing Class I impacts prior to approval of the Project.

L001-3

Section 4.4 and Appendix F contain information on visual resources, impacts, and mitigation. Appendix F describes how visibility from various distances was evaluated and provides additional simulations prepared for viewpoints at elevated sites along the Malibu coastline and inland areas. Figure 2.2-1 shows the height of the structures above the loaded waterline, which is also discussed in Section 4.4.1.1.

Section 4.4.1.1 discusses the FSRU's position in relation to the coastline. The general orientation of the FSRU due to prevailing wind and water currents would be roughly parallel to the coast. This is the view used in simulations. Section 4.4.1.2 contains additional information on offshore views from the coastline.

The mainland locations used for the simulations are the two onshore areas closest to the FSRU; therefore, the simulated views present the worst case scenario for visual impacts under a variety of weather conditions.

L001-4
Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

Thank you for allowing the County of Los Angeles to provide comments on the RDEIR for this proposed project. If you have any question regarding this matter, please contact *Daryl Koutnik* of the Impact Analysis Section at (213) 974-6461, from 7a.m. to 6:00 p.m., Monday through Thursday. Our offices are closed on Fridays.

Sincerely,

DEPARTMENT OF REGIONAL PLANNING
James E. Hartl, AICP
Acting Director of Planning

Daryl Koutnik, Supervising Regional Planner
Impact Analysis Section
(213) 974-6461
JEH:DLK:dlk

From the Desk of **STEVE BENNETT**
SUPERVISOR, FIRST DISTRICT
(805) 654-2703
FAX: (805) 654-2226
E-mail:steve.bennett@ventura.org

May 17, 2006

Dwight E. Sanders
California State Lands Commission
Div. of Environmental Planning & Management
100 Howe Avenue, Ste. 100-South
Sacramento, CA 95825

Submitted Via E-mail: BHPRevisedDEIR@slc.ca.gov

RE: SCH# 2004021107 BHP Billiton LNG Terminal EIR

The BHP Billiton project will adversely impact the air quality of the Ventura County, Santa Barbara County, and Los Angeles County airsheds in a number of different ways. However, the EIR does not adequately address the full range of emissions sources that the project would create. The EIR must be revised to identify and mitigate any and all emissions sources associated with the project, including but not limited to: onshore and offshore construction including pipeline construction, FSRU operation including LNG tankers, service and supply boats, and the FSRU itself, increased operation of natural gas compressors by BHP, Southern California Gas Co. or others, and increased pipeline operations and maintenance.

The EIR accepts as part of the emission inventory several emission reduction measures proposed by the applicant. CEQA requires that mitigation measures be both clearly feasible and enforceable. The EIR does not meet this requirement in accepting at face value the applicant's proposal to use either all LNG-powered tankers, or more problematically, switch tankers from fuel oil to LNG power upon entering California waters. The former has not been demonstrated to be feasible, particularly within the timeframe of project inauguration, and the latter is wholly unenforceable. The EIR should therefore use a most-likely-case scenario of tanker emissions without accepting these applicant's proposals.

L003-1

2006/L003

L003-1
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. Section 4.6.1.3 contains revised information on Project emissions and proposed control measures. Section 4.6.4 discusses the health effects attributed to air pollutants and includes revised impacts and mitigation measures.

The lead Federal and State agencies share the responsibility to ensure that mitigation measures are implemented. Table 6.1-1 in Chapter 6 is the basis for the Mitigation Monitoring Program, which would be implemented, consistent with section 15097(a) of the State CEQA Guidelines, to ensure that each mitigation measure is incorporated into Project design, construction, operation, and maintenance activities.

Once all possible emissions sources are identified and quantified using a most-likely-case approach, then, and most importantly, every pound of emissions must be mitigated, regardless of jurisdictional or regulatory issues. The highest standards of mitigation must be applied to assure that bringing this facility on-line does not harm the health of Southern California residents. It is well known that off-shore shipping and activities are a major contributor to air pollution in the Ventura, Santa Barbara, and Los Angeles airsheds, and that our region's air quality does not meet state standards for health protection. L003-1 Continued

It is critical that the BHP project not in any way worsen our air quality and our citizens' health. I disagree that the project should not be subject to the Prevention of Significant Deterioration (PSD) requirements. The project will most certainly contribute to preventable significant deterioration of regional air quality if all impacts are not fully mitigated. Rather than narrowly and favorably (for the applicant) interpreting rules that were never intended to address an offshore LNG terminal in this location, the EPA should instead apply the more stringent impact assessment and mitigation standards to this major project to prevent deterioration of regional air quality as clearly intended by the Clean Air Act. L003-2

The conclusion that PSD should not apply because the FSRU emits less than 100 tons or is not one of the 28 named source categories to which PSD applies are flawed interpretations. When emissions from LNG tankers berthed at the FSRU, and supply and service boats are counted, emissions are substantially greater than 100 tons per year. The EPA conclusion that the FSRU is not subject to PSD as a "fuel conversion plant" is also based on faulty characterization of the FSRU operation. The EPA conclusion that vaporization occurs without a "process change" "since vaporization would occur naturally at ambient conditions without additional processing" ignores the primary function of the FSRU to employ large-scale thermal processing to convert the LNG into gas.

Cordially,

Steve Bennett
Supervisor, First District

L003-1 Continued

L003-2
The USEPA has jurisdiction to determine whether a prevention of significant deterioration (PSD) permit is required for the Project. Section 4.6.4 contains information on the regulatory setting associated with air quality. The USEPA has made a preliminary determination, on which the lead agencies must rely, that the FSRU should be permitted in the same manner as sources on the Channel Islands that are part of Ventura County. Section 4.6.2 contains an updated discussion of relevant regulatory requirements.

Impact AIR-4 and Impact AIR-5 in Section 4.6.4 have been revised to provide specific information regarding the Applicant's emissions reduction programs and their review by the USEPA and the California Air Resources Board (CARB). As part of air permit-to-construct application procedures, the Applicant has committed to the USEPA to achieve emissions reductions (in addition to reductions inherent to the Project) to an amount equal to the FSRU's annual NOx emissions. The Applicant has executed contracts to retrofit two marine vessels (long haul tugs) by replacing the propulsion engines of each vessel with modern low emitting engines (Tier 2 compliant diesel-fired engines). At the request of the USEPA and the CARB, the Applicant conducted source testing to assist in determining the emission reductions expected as a result of the retrofits. Both the USEPA and the CARB have reviewed the results, but there is not yet a consensus on the estimated emission reductions from the mitigation proposal.

Based on the USEPA's and CARB's estimates, the proposed Emissions Reduction Program (AM AIR-4a) would provide for NOx emission reductions greater than the estimated annual NOx emissions from FSRU equipment and estimated NOx emissions from operation of LNG carrier offloading equipment. However, the total emission reductions would be less than the annual NOx emissions estimated for all operations (FSRU and Project vessels) in California Coastal Waters, as defined by the CARB. According to CARB, the emission reduction proposal "represents more than what would otherwise be required by the current determination of applicable regulations."

Appendix G9 contains a memorandum from the CARB to the CSLC on this topic. Electronic copies of the Applicant's reports submitted to the USEPA that detail the tug retrofits and related emission

reductions are available at
www.epa.gov/region09/liq-natl-gas/cabrillo-air.html.

ADMINISTRATION

NANCY J. CARROLL, Ph.D.
Superintendent

CRAIG W. HELMSTEDTER, Ed.D.
Associate Superintendent

CYNTHIA HANSEN
Director of Fiscal Services

MARCIA TURNER
Director of Special Projects

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Quality Education for Student Success
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L205

ES

PAUL H. CHATMAN
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JAMES A. MERRILL

California State Lands Commission
100 Howe Avenue
Suite 100-South
Sacramento, California 95825
Attn: Dwight E. Sanders

State Clearinghouse Number: 2004021107

April 6, 2006

Dear Sir:

This letter is written in response to the Revised Draft Environmental Impact Report (DEIR) for the Cabrillo Port Liquefied Natural Gas Deepwater Port. My comments are in response to Section 4.13-15 and 4.13-16, and the proposed pipeline route for the Center Road Pipeline Location indicated in Figure 2.4-1. The DEIR incorrectly states that, "Although several potential locations for new or expanded schools have been evaluated, none has been proposed to date" (4.13-15). The Draft Environmental Impact Report for the Ormond Beach Specific Plan Project was announced on September 12, 2005 and is in process. That report includes two planning subareas within an approximately 920-acre Study Area. The Northern Subarea consists of *"approximately 323 acres of the Project Area that lies north of Hueneme Road. It is proposed to accommodate a mix of uses including up to 1,283 residential dwelling units of various types and densities; an elementary school; a high school (either within the Study Area or East of Olds Road); a community park; neighborhood parks; a 10-acre lake; a mixed-use commercial marketplace; light industrial uses; and open space and trails."*

Section 4.13-16 further states that the construction for the proposed Ocean View school within the Hearthside Homes planned subdivision has "not been funded or programmed yet". Ocean View School District and Hearthside Homes are currently in the mitigation process developing the final agreement for the financing of the school to be built. BHP Billiton was informed of this status on numerous occasions. Additionally, no less than three meetings were held between various Superintendents representing school districts throughout Ventura County, Mr. George Shaw, California Department of Education Field Representative for the School Facilities Planning Division, and Mr. Steve Meehan, Consultant for BHP Billiton. The dates were on

L205-1

L205-1
Thank you for the information. Section 4.13.1.3 contains revised text. The text has been modified to include the ongoing discussions between the school district and Hearthside Homes.

On February 27, 2004, the Coast Guard, the Maritime Administration (MARAD), and the California State Lands Commission (CSLC) issued a notice of intent and notice of preparation (NOI/NOP) for preparation of a joint environmental impact statement/environmental impact report (EIS/EIR) for the proposed Cabrillo Port Liquefied Natural Gas Deepwater Port. As indicated in the comment, the City of Oxnard issued an NOP for an EIR for the Ormond Beach Specific Plan on September 12, 2005, for development of a 920-acre community that extends from Edison Road on the west to Olds and Arnold Road on the east, West Pleasant Valley Drive on the North and the Pacific Ocean to the South. A Draft EIR for the Ormond Beach Specific Plan Area has not been issued, however, and the specific plan has not yet been approved.

December 21, 2004, February 18, 2005, and March 9, 2005. The proposed locations of the pipeline and routes were discussed at length including the effects of constructing a 36-inch diameter natural gas pipeline that will operate at a pressure of 1,200 pounds per square inch (psi). Routing the pipeline adjacent or near existing school sites and proposed school sites was and remains of great concern.

California Code of Regulations, Title 5 and the California Education Code require that school districts seeking state funding for construction of a new school or expansion of an existing school conduct a Pipeline Risk Analysis for any buried pipeline operating at or above 80 psi within 1,500 feet of the school site. The Pipeline Risk Analysis must be completed in accordance with the guidelines and procedures specified in *California Department of Education Proposed Standard Protocol for Pipeline Risk Analysis* (CDE 2002). The CDE (2002) guidance provides for three levels of pipeline risk analyses, Stage 1, Stage 2, and Stage 3, in order of increasing complexity. To qualify for a Stage 1 analysis, the pipeline in question must be operating at less than 400 psi; therefore, the proposed pipeline does not qualify for a Stage 1 analysis. Stage 3 analyses are typically completed when a conservative Stage 2 analysis indicates unacceptable risk and are required for pipelines carrying products other than natural gas or liquid petroleum, or sites with special conditions, such as complex topography. This implies that the installation of a 36-inch diameter natural gas pipeline will require more than the minimum 1,500 foot setback for a school. Hence, the safety of the new elementary school is in question due to the distance between the proposed LNG large capacity, high pressure lines and the school facility.

L205-2

Once again, I suggest that if the Cabrillo Port Liquefied Natural Gas Deepwater Port Project moves forward, alternate routes for the Center Road Pipeline location be reconsidered. The preferred route takes into account the Point Mugu Shore Crossing/Casper Road Pipeline route as indicated in Figure 3.4-2.

L205-3

Thank you for considering these concerns regarding the proximity of the proposed pipeline on Hueneme Road to the new school to be built in the SouthShore development.

L205-4

Sincerely,

Nancy J Carroll

Nancy J Carroll, Ph. D.
Superintendent
Ocean View School District

L205-2

Section 4.13.1 discusses sensitive land uses in proximity to proposed and alternative pipeline routes, such as schools. There are no existing schools in the immediate vicinity of either of the proposed pipeline routes. Section 4.2.8 describes regulations regarding pipelines, including the requirement to establish public education programs to prevent and respond to pipeline emergencies. Section 4.16.1.2 describes emergency planning and response capabilities in the Project area.

The proposed pipelines within Oxnard city limits would meet standards that are more stringent than those of existing pipelines because they would meet the minimum design criteria for a U.S. Department of Transportation (USDOT) Class 3 location. Also, MM PS-4c includes the installation of additional mainline valves equipped with either remote valve controls or automatic line break controls. SoCalGas operates high-pressure natural gas pipelines throughout Southern California.

Section 4.13.1.3 contains information on standards school districts must meet to qualify for State school bond funds for the acquisition of a new school site and construction of a new school facility.

School site selection standards, Title 5 of the California Code of Regulations section 14010(h), state that school sites shall not be located near an aboveground water or fuel storage tank or within 1,500 feet of the easement of an aboveground or underground pipeline that can pose a safety hazard as determined by a risk analysis study conducted by a competent professional. According to the State of California Department of Education (CDE), the May 2002 draft *Proposed Standard Protocol Pipeline Risk Analysis*, which was prepared under contract for the CDE, has become the de facto acceptable assessment methodology to guide the conduct of such a risk analysis after a school site is selected, even though there is no legal requirement to use it.

Section 14010(h) does not prescribe a minimum setback for proposed school sites from natural gas pipelines, and the existence of a pipeline within 1,500 feet of a proposed school site does not automatically preclude the site from approval. The results of the risk analysis are used to determine the suitability of a proposed school site and would be used to prescribe setback requirements on a case-by-case basis.

Education Code section 17213 prohibits the acquisition of a school site by a school district if the site "contains one or more pipelines, situated underground or aboveground, which carries hazardous

substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line which is used only to supply natural gas to that school or neighborhood." The proposed natural gas pipeline will not carry liquefied natural gas (LNG), rather it will carry natural gas in gaseous form. The proposed natural gas pipeline does not cross the proposed school site.

L205-3
The proposed alignment of the Center Road Pipeline along Hueneme Road is adjacent to the southern boundary of the proposed Ormond Beach Specific Plan Area. The Applicant has also incorporated measure AM LU-1 into the proposed Project (see Section 4.13.4). As allowed by existing franchise agreements SoCalGas has with the City of Oxnard, this Applicant measure would align the Center Road Pipeline in the ROW of the future McWane Boulevard, south of Hueneme Road between Edison Drive and Arnold Road, if this routing of McWane Boulevard were to be approved and constructed prior to the construction of the Center Road Pipeline.

L205-4
Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

L207

Resolution #05-13

Oxnard School District

RESOLUTION OPPOSED TO THE PROPOSED CABRILLO PORT LIQUEFIED NATURAL GAS DEEPWATER PORT

WHEREAS, many energy companies have announced plans to build a host of new terminals where large amounts of gas could be imported by tanker in liquefied form and then distributed by pipeline to American customers; and

WHEREAS, BHP Billiton, has proposed offshore gas terminals close to the coast of Oxnard. This proposal envision offshore facilities that would include large underwater pipelines that would come ashore underground in Ventura County. Specifically, BHP Billiton proposes to establish a floating terminal 14 miles off the county's southern coast. The liquid would be converted back to gas at the facility, then shipped through pipelines to a Southern California Gas Company facility near Oxnard School District; and

WHEREAS, the LNG project will significantly contribute to air pollution, and otherwise adversely affect the environment. The terminal itself will emit about 270 tons of smog producing air pollution a year that could have significant health impacts on the people of Ventura County, particularly the school children and the elderly; and L207-1

WHEREAS, currently there are no models that reflect the structure of LNG carriers which are equipped with barriers between cargo tanks and double hulls which carry LNG; there are no models that take into account wave action, wind and water currents; and L207-2

WHEREAS, never before, anywhere in the world, has an LNG regasification platform been attempted at sea, it is experimental; and L207-3

WHEREAS, the huge pipelines will be placed dangerously close to schools, residences and hospitals and it is the District's responsibility to protect the health of our students, protect the air quality to include the safety impact of all concerned; and L207-4

WHEREAS, the Oxnard Council PTA has taken a position against the "Proposed Cabrillo Port Liquefied Deepwater Port Project" because of safety concerns related to the project, the proximity to schools and the additional air pollution to which students would be exposed to if the project was approved. L207-5

NOW, THEREFORE BE IT RESOLVED, that the Board of Trustees of the Oxnard School District hereby take an "oppose" position to the "Proposed Cabrillo Port Liquefied Natural Gas Deepwater Port Project" because of the adverse effects on the City of Oxnard, the students, employees and families, and the potential adverse effects on Oxnard School District, students, schools and residences thereof.

ADOPTED this 16th day of November, 2005.

John M. MacArthur III, President, Board of Trustees
Ana del Rio Barba, Clerk, Board of Trustees
Denis O'Leary, Member, Board of Trustees
Francisco J. Dominguez, Member, Board of Trustees
Arthur Joe Lopez, Member, Board of Trustees

L207-1
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. Section 4.6.1.3 contains revised information on Project emissions and proposed control measures. Section 4.6.4 discusses the health effects attributed to air pollutants and includes revised impacts and mitigation measures.

L207-2
The lead agencies directed preparation of the Independent Risk Assessment (IRA), and the U.S. Department of Energy's Sandia National Laboratories independently reviewed it, as discussed in Section 4.2 and Appendix C.

Section 4.2.7.6 and the IRA (Appendix C1) discuss the models and assumptions used and the verification process. Sandia National Laboratories (Appendix C2) concluded that the models used were appropriate and produced valid results.

L207-3
Section 2.1 contains information on design criteria and specifications, final design requirements, and regulations governing the construction of the FSRU. The Cabrillo Port must be designed in accordance with applicable standards, and the U.S. Coast Guard has final approval. Section 4.2.4 contains information on Federal and State agency jurisdiction and cooperation. The Deepwater Port Act specifies regulations that all deepwater ports must meet; Section 4.2.7.3 contains information on design and safety standards for the deepwater port. Section 4.2.8.2 contains information on pipeline safety and inspections. Impact EJ-1 in Section 4.19.4 addresses additional pipeline design requirements in areas of low-income and minority communities. The EIS/EIR's analyses have been developed with consideration of these factors and regulations and in full conformance with the requirements of NEPA and the CEQA.

L207-4
Section 4.13.1 contains information on sensitive land uses in proximity to proposed and alternative pipeline routes, such as schools. There are no schools in the immediate vicinity of either of the proposed pipeline routes. Section 4.2.8 describes regulations regarding pipelines, including the requirement to establish public education programs to prevent and respond to pipeline emergencies. Section 4.2.8.4 contains information on the estimated risk of Project pipeline incidents. Section 4.16.1.2 describes emergency planning and response capabilities in the Project area.

The proposed alignment of the Center Road Pipeline along Hueneme Road is adjacent to the southern boundary of the proposed Ormond Beach Specific Plan Area. The Applicant has also incorporated measure AM LU-1 into the proposed Project (see Section 4.13.4). As allowed by existing franchise agreements SoCalGas has with the City of Oxnard, this Applicant measure would align the Center Road Pipeline in the ROW of the future McWane Boulevard, south of Hueneme Road between Edison Drive and Arnold Road, if this routing of McWane Boulevard were to be approved and constructed prior to the construction of the Center Road Pipeline.

The proposed pipelines within Oxnard city limits would meet standards that are more stringent than those of existing pipelines because they would meet the minimum design criteria for a U.S. Department of Transportation (USDOT) Class 3 location. Also, MM PS-4c includes the installation of additional mainline valves equipped with either remote valve controls or automatic line break controls. SoCalGas operates high-pressure natural gas pipelines throughout Southern California.

L207-5
Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

L203

Oxnard Union
High School District

309 South 'K' Street
Oxnard, CA 93030
Telephone: (805) 385-2500
Facsimile: (805) 483-3069
www.ouhsd.k12.ca.us

April 26, 2006

Dwight E. Sanders
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Dear Mr. Sanders:

The section regarding Oxnard Union High School District (OUHSD) on page 4.13-16 of the Cabrillo Port Liquefied Natural Gas Deepwater Port Revised Draft EIR dated March, 2006, is highly inaccurate. L203-1

The three sites studied by OUHSD that were discussed in the Draft EIR were alternatives to the primary high school site identified in the City of Oxnard 2020 Plan adopted on October 7, 1990.

The primary "2020 Plan High School Site" is also on Hueneme Road near Olds Road. This site, as well as the three alternative sites, would be unusable as a school site if the proposed Center Road Pipeline, or any of the three alternative Center Road Pipelines, or the Arnold Road Pipeline, is constructed. Also, the three alternative high school sites are unusable if the Point Mugu Crossing/Casper Road pipeline is constructed--and this pipeline might also exclude the primary 2020 Plan High School Site. Simply stated, the proposed pipelines would eliminate the new high school that is intended to be built in this area. L203-2

Furthermore, the Draft EIR misleads users to believe that the three alternative sites have conditions that are great obstacles to school construction. This is not the case. All four sites, the three alternative sites and the primary 2020 Plan High School Site, have fewer unfavorable attributes than sites we have used in the past. L203-3

In Ventura County, schools are allowed to build within SOAR. The sites all satisfy Cal Trans aircraft runway restrictions for school sites. The primary site is within the City of Oxnard and the alternative sites are adjacent to existing curb lines. Annexing any of the sites for roads and utilities would not be a significant problem.

The City of Oxnard wants a new school in this area. There are two needs for a new high school--one is to accommodate growth; the other is to replace an older existing high school that occupies an undersized lot. It is very difficult to find and acquire 55-acre high school sites. The proposed pipelines would eliminate all potential sites for growth and replacement high schools in south Oxnard. L203-4 L203-5

Again, we ask that the proposed pipelines be relocated a safe distance from identified future school sites. If our request to locate the proposed pipelines a safe distance from future high school sites is ignored, OUHSD will seek legal advice about remedies for the obstruction of educational opportunities for generations of high school students in south Oxnard. Also, we ask that errors and misleading comments about high school sites in the Draft EIR be corrected. L203-6

Sincerely,

Randy Winton

Randy Winton
Assistant Superintendent, Business Services

RW/gdt
EIRRevisedSanders/h/co/letter

c: Lt. Ken Kusano, U.S. Coast Guard

L203-1
Thank you for the information. Section 4.13.1.3 contains revised text.

L203-2
Section 4.13.1.3 contains information on standards school districts must meet to qualify for State school bond funds for the acquisition of a new school site and construction of a new school facility.

School site selection standards, Title 5 of the California Code of Regulations section 14010(h), state that school sites shall not be located near an aboveground water or fuel storage tank or within 1,500 feet of the easement of an aboveground or underground pipeline that can pose a safety hazard as determined by a risk analysis study conducted by a competent professional. According to the State of California Department of Education (CDE), the May 2002 draft *Proposed Standard Protocol Pipeline Risk Analysis*, which was prepared under contract for the CDE, has become the de facto acceptable assessment methodology to guide the conduct of such a risk analysis after a school site is selected, even though there is no legal requirement to use it. Section 14010(h) does not prescribe a minimum setback for proposed school sites from natural gas pipelines, and the existence of a pipeline within 1,500 feet of a proposed school site does not automatically preclude it from approval. The results of the risk analysis are used to determine the suitability of a proposed school site and would be used to prescribe setback requirements on a case-by-case basis.

Education Code section 17213 prohibits the acquisition of a school site by a school district if the site "contains one or more pipelines, situated underground or aboveground, which carries hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line which is used only to supply natural gas to that school or neighborhood." The proposed natural gas pipeline is adjacent to some of the possible high school sites, but it does not cross any of the sites.

L203-3
Thank you for the information. Section 4.13.1.3 contains revised text on this topic and Figure 4.13-6 shows the locations of the possible school sites. The text regarding the possible high school sites was presented to summarize the information provided in the school sites feasibility analysis, and did not make comparisons with any other studies that may have conducted on the viability of school sites in the Ormond Beach area.

The City of Oxnard Planning and Environmental Services Division's

Jurisdictional Boundaries map indicates that all five sites identified as possible high school sites are outside of the boundaries of the City of Oxnard. The five sites include the site identified in Oxnard's 2020 General Plan, the three alternative sites evaluated, and the site identified in the notice of preparation for the proposed Ormond Beach Specific Plan.

L203-4
Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

L203-5
See the response to Comment L203-2.

L203-6
See the response to Comment L203-1.

PORT HUENEME HARBOR SAFETY COMMITTEE

Mandated by
California Oil Spill Prevention and
Response Act of 1990

May 5, 2006

Mr. Dwight E. Sanders
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Subject: Comments on the *March 2006 Revised Draft Environmental Impact Report for the Cabrillo Port Liquefied Natural Gas Deepwater Port,* State Clearinghouse # 2004021107.

Dear Mr. Sanders:

The Port Hueneme Harbor Safety Committee (HSC) was established in 1991, under the mandate of the California Oil Spill Prevention and Response Act of 1990 (Government Code Division 1, Chap. 7.4, Article 3, Sections 8670.23 – 8670.24). Pursuant to Government Code §8670.23.1, the HSC is responsible for planning the safe navigation and operation of tankers, barges, and other vessels within the Port Hueneme harbor.

Therefore, the Port Hueneme HSC has reviewed *Section 4.3 Marine Traffic* of the *March 2006 Revised Draft Environmental Impact Report for the Cabrillo Port Liquefied Natural Gas Deepwater Port* for information about the proposed project and its potential impacts on the safety and navigation of the vessels (*e.g.*, cargo, fishing, recreation, oil supply) that transit to and from the Port of Hueneme.

We respectfully submit our comments on the attached pages. Please note we have included Addendum 1 in support of the comments from the fishing community who are represented on the Port Hueneme Harbor Safety Committee.

If you have any questions please feel free to call me at 805-933-2110.

Thank you for your consideration.

Sincerely,

Captain Andrew Harvey, Chairman
Port Hueneme Harbor Safety Committee

Post Office Box 608, Port Hueneme, CA 93044
105 Hueneme Road, Port Hueneme, CA

PORT HUENEME HARBOR SAFETY COMMITTEE
COMMENTS ON:

SECTION 4.3-MARINE TRAFFIC* OF THE *MARCH 2006 REVISED DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CABRILLO PORT LIQUEFIED NATURAL GAS DEEPWATER PORT
(State Clearinghouse # 2004021107)

1. **Inaccuracies in Table 4.3.-1: Average Vessel Traffic Transits, page 4.3.-5, 6 (Section 4.3.1.1 Existing Vessel and Proposed Traffic).**

   a. *The vessel traffic numbers are incorrect. The number of cargo ships transiting to/from Port Hueneme has increased. Ship transit estimates need updating to 2005/2006 numbers (or most recent).*

      (1) The "number of ships per year" and "number of transits" for all the categories (*e.g.,* fishing, commercial traffic into Port Hueneme, Navy) are based on 2003 statistics, and do not reflect the much higher 2005 traffic volumes. Please update all the vessel categories with 2005/2006 figures, or most recent figures. For example, Port of Hueneme total traffic for 2005 was 400 ships, versus the 243 ships reported in Table 4.3-1. Contact Oxnard Harbor District/Port of Hueneme, USCG, SoCal Marine Exchange, Navy, Ventura County Commercial Fishermen's Association, and Western States Petroleum Association for latest statistics. L221-1

      (2) "Merchant Vessel Using Coastal Traffic Lanes" category implies that tanker traffic to/from the North to LA/LB uses the TSS for it's entire length. This is not the case. This traffic (for the most part) departs the TSS and transits South of the Channel Islands thus crossing the inbound/outbound routes of the LNG vessels to the FSRU. These crossing situations need to be discussed. L221-2

   b. *Table reorganization suggestion*

      (1) Place the "LNG carriers…" and "Supply Vessels…" categories at end of table, and rename them as "Proposed LNG…" and Proposed Supply…" This will more clearly separate the Project's proposed/estimated vessel traffic from the real/actual number of other existing vessel traffic. L221-3

2. **Impacts on Existing Vessel Traffic Patterns Coming Into Port Hueneme from the Proposed LNG Carrier Route(Section 4.3.1.1 or 4.3.1.3).**

   Figure 4.3-2 on page 4.3-9, Page 4.3-12, lines 20-36, page 4.3-31, lines 36-42 indicate that the preferred route for the LNG carriers would avoid the LA/LB VTS and the Santa Barbara TSS lanes. Instead, the LNG carriers propose to use the West Tanner Bank approach route,

L221-1
Table 4.3-1 has been updated with the latest available information about vessel traffic to and from Port Hueneme.

L221-2
Section 4.3.1 contains an updated discussion of tanker routes.

L221-3
Table 4.3-1 contains the suggested revisions.

which would put vessels through a small portion of the SOCAL Range Complex and the Point Mugu Sea Range, (unless due to military testing operations the Navy directed them to use the alternate Outer Santa Barbara Passage approach route). In addition, the cargo vessels traveling through the proposed Area to be Avoided (ATBA) zone surrounding the FSRU (2.3 mile radius) will be required to slow to 10 knots per hour.

The DEIR does not provide adequate discussion of potential impacts of the proposed LNG carrier route and the ATBA zone on the routes and traffic patterns of the other cargo ships that call directly at Port Hueneme (*e.g.,* banana boats, car carriers). As stated in Comment 1 above, there has been a significant increase in vessel traffic into Port Hueneme (400 ships called in 2005). There are potential traffic congestion and vessel safety issues should the cargo vessels find it necessary to re-route themselves to avoid the LNG carriers in transit.

For example:

(1) Although the LNG preferred proposed route may minimize interference with coastwise commercial traffic in the TSS lanes, it has the potential for significant routing impacts for cargo ships calling at Port Hueneme (*e.g.,* Chiquita and Del Monte Fresh Produce banana boats, car carriers). These vessels currently transit along the same general West Tanner Bank/Point Mugu Sea Range approach route that is proposed for the LNG carriers (DEIR Figure 4.3.-2, page 4.3-9). It is estimated that the LNG carriers will visit the FSRU 2-3 times a week (104 -130 visits per year), so incoming plus outgoing transits across the Point Mugu Sea Range may total 4-6 per week and 208-260 per year. Cargo ships that have traditionally used Port Hueneme (via the routes also preferred by LNG) may need to re-route themselves when the LNG carriers are in transit. Depending on the re-route approach used by the cargo vessels there may be impacts on the traffic congestion at new locations of the Santa Barbara Channel TSS lanes, thereby affecting traffic safety conditions. Please discuss this more fully in the EIR.

(2) In addition to the potential impacts caused by the LNG carrier traffic routes that are discussed in Comment (1) above, the proposed ATBA surrounding the FSRU will require vessels transiting the ATBA to reduce their speed to 10 knots. This required reduction in vessel speed may cause the cargo ships to re-route around the ATBA, and therefore has the potential to create additional traffic congestion and vessel safety issues for the ship traffic in the Santa Barbara TSS lanes, if the re-routed vessels begin entering the TSS lanes at a new location further south. Please discuss this more fully in the EIR.

3. Risks and Hazards of Natural Gas Powered Tug/Supply Vessels and Crew Boats.

Line 6, page 4.3-12, line 1 states that the tug/supply vessels will have 15,000 BHP engine fueled by natural gas. The Port Hueneme HSC has the following concerns about the safety of these natural gas tanks when the tug/supply vessels and crew boats are docked in port. Please address these concerns in EIR Section 4.3, or if they are addressed in another EIR section, please provide reference to that section in Section 4.3.

L221-4

As discussed in Impact MT-2 in Section 4.3.4, the Applicant has reduced the number of LNG carriers that would call on the FSRU to an annual maximum of 99 or a maximum of two per week. As a result, there would be no more than four Project LNG carrier transits to and from the FSRU each week.

L221-4

Cargo vessels would not have to be re-routed due to the presence of LNG carriers because there are no restrictions associated with LNG carriers outside of Federal waters and Project LNG carriers would not enter Federal waters.

L221-5

L221-5

As discussed in Impact MT-2 in Section 4.3.4, security zones only apply to LNG carriers in Federal waters (within 12 NM from shore). Since Project LNG carriers would not have security zones, cargo vessels would only have to observe the "rules of the road" when transiting near an LNG carrier, the same measures they would take when transiting near any large commercial vessel.

L221-6

L221-6

As stated in Section 2.2.4, "[t]he Area to be Avoided (ATBA) would likely extend to 2 NM (2.3 miles or 3.7 km) from the stern of the FSRU; however, the actual size of the ATBA would be established through the advice and consent of the Office of Vessel Traffic Management (COMDT (CG-3PWN-4)) of the USCG. The ATBA is considered by the USCG to be a recommendatory routing measure per 33 CFR 150.905(c). The COMDT (CG-3PWN-4) would evaluate the size of the ATBA based on location, port configuration, and size of the LNG carriers to be serviced. The COMDT (CG-3PWN-4) would likely consult with USCG district-level waterways management staff to ensure that all geographic factors are considered before determining the final routing measures." As stated in Section 4.3.1.4 "[m]ariners would not be penalized for entering this area, nor would any action be taken to require them to leave the area. A vessel transiting the ATBA would be requested to restrict its speed to no more than 10 knots (19 km/hour) and to check in and out with the Cabrillo Port vessel operations manager. Both the speed limit restriction and contact with the Cabrillo Port vessel operations manager would be voluntary actions by mariners in vessels transiting the ATBA."

L221-7

L221-7

The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. Tugs and crew vessels would have diesel engines equipped with air pollution control technology that would result in

emissions comparable to emissions from natural gas-fueled engines.

Comments/Questions:

1. Has this size of tug/supply vessel and crew boat, with natural gas fuel tanks, been built, tested, and used anywhere else in the world? Or, is this the first time that this type of tug and crew/supply vessel will be built?
2. What is the risk of explosion or spill from the tanks onboard the tug/supply vessel and the crew boat? What is the accident history and safe operations history for this type of tug/supply vessel and crew boat?
3. Has a safety analysis and worst case "natural gas" explosion/spill scenario been done in the event of an accident to the tug/supply vessel or crew boat while it is berthed at Port Hueneme?
4. How many and what size tanks need to be on board for storing the natural gas fuel? How much natural gas fuel needs to be stored for the estimated 2 week fueling supply?

4. Proposed Tug/Supply Vessel and Crew Boat Traffic Routes to/from Port Hueneme.

Page 4.3-13 Line 9 and page 4.3-21, line 11 indicate that the BHP tug/supply vessels and crew boats would use the appropriate designated Santa Barbara TSS traffic lanes and exit the TSS near their destination (FSRU or Port Hueneme) in accordance with rules of the road. It is estimated that there will be a maximum of 10 transits per week.

If the smaller tug/supply vessels and crew boats transit inside the TSS they may add unnecessary congestion and may interfere with the larger cargo ships exiting the TSS at Port Hueneme.

There are two "schools" of thought regarding vessel safety and traffic between the tug/supply vessels and crew boats and the larger commercial cargo ships:

- Since the tug/supply vessels and crew boats are fairly small they may be better off doing a direct crossing of the TSS and using an inshore route, to and from the FSRU to avoid extended interaction with larger vessels in the TSS.
- Alternatively, by keeping the small vessels in the TSS their route will be clear to all for a larger portion of all vessels (fishing, recreational) which may not be equipped with AIS. Thus, experience may be the best way to decide the final route.

The DEIR does not provide enough information on the potential spill/explosion risks and hazards from the natural gas fuel tanks powering the tug/supply vessels and crew boats (see Comment 3). This information is needed to determine the safest route for the tug/supply vessel and crew boat transits to Port Hueneme.

Comments:

Please include discussion of the risks and hazards of the natural gas powered tug/supply vessels and crew boats (see Comment 3) and consideration of the following two options:

(1) Please have the EIR consider the alternative of having the BHP tug/supply vessels and crew boats transit to/from the FSRU using a 90 degree path to cross the TSS

L221-7 Continued

L221-7
Continued

L221-8

L221-9

L221-7 Continued

L221-8
Impact MT-2 in Section 4.3.4 has been revised. As stated, "The proposed approximate routes between the FSRU and Port Hueneme are illustrated in Figure 4.3-3 above. The exact routes would be determined according to the Cabrillo Port Marine Operations Guidelines, area traffic, weather conditions, and vessel captain's discretion in dealing safely with these variables."

L221-9
See response to Comment L221-7.

The Cabrillo Port support vessels would use the traffic separation scheme (TSS) transits between Port Hueneme and Cabrillo Port and would enter and exit in accordance with the provisions of Rule 10 of Inland Navigation Rules (the TSS is inside the boundary of U.S. Territorial waters)."

lanes and then transit to/from Port Hueneme on a path adjacent and parallel to the TSS lanes (between shore and TSS lanes), turning into the Port Hueneme access route at the Port Hueneme sea buoy.

(2) As an alternative, the TSS lane route could be used for a trial period with acommitment by BHP to try the other suggested transit path (above) if monitoring indicates a risk for vessel collisions and impacts to the larger commercial ship traffic calling at Port Hueneme.

5. FSRU's Marine Traffic Monitoring System.

The LA/LB VTS system extends 25 nautical miles (29 miles) from the Point Fermin lighthouse. It does not provide traffic control in the Santa Barbara Channel TSS or extend to the proposed FSRU location (DEIR page 4.3-11). To avoid potential collisions with other vessels, the FSRU will have its own marine traffic monitoring system that will monitor the incoming and outgoing LNG carriers (DEIR page 4.3-32 lines 5-14).

Comment:

(1) Will the FSRU's marine monitoring system be compatible and consistent with the LA/LB VTS? Will it be able to tie into and transmit information to the LA/LB VTS? Will it be able to act as an expansion of the USCG VTS, so that the USCG and SoCal Marine Exchange can forewarn ships leaving LA/LB and heading north about potential LNG vessel traffic issues? Will the FSRU marine monitoring system provide reports to the USCG? Please clarify.

L221-9 Continued

L221-9
Continued

L221-10
Section 4.3.1.4 contains informtion on the FSRU's marine monitoring system that addresses the comment.

L221-10

ADDENDUM 1

Commercial Fishing Vessel Safety and Traffic

The Port Hueneme HSC appreciates BHP's commitment to direct tug/supply vessel and crew boat traffic into the Joint Oil/Fisheries Committee of South/Central California (JOFLO) vessel corridors within 30 fathoms (180 feet) of shore to minimize/avoid impacts and interactions between FSRU support vessel traffic and the commercial fishermen activities (Mitigation Measure AM-MT-2c, page 4.3-33, lines 7-16 and 26-31).

However, the DEIR does not provide sufficient discussion about the potential impacts to fishing vessel safety and traffic activities caused by the proposed LNG carrier routes through the West Tanner Fishing Banks and the proposed 1640 feet (500 meter) Safety Zone around the FSRU.

Comments:

(1) The West Tanner Banks is one of two major fisheries for southern California fisherman. The proposed LNG carrier route traverses directly through these premier fishing grounds. BHP proposes LNG carrier transits 4-6 times a week (in and out) for a maximum of 208-360 transits a year. For security reasons, no vessel is allowed within a range of 1000 yards of the LNG carrier stern and bow and 500 yards of either side. Consequently, fishing vessels may encounter restrictions to or interruptions of their fishing activities in the area of the LNG carrier route 4-6 times a week. An evaluation of the potential impacts to fishing vessel traffic and activities in the West Tanner Banks from the proposed LNG carrier transits could not be found in DEIR Section 4.3. Please add this type of evaluation in Section 4.3, or if it exists in another section please provide reference to that section.

(2) Page 4.3-2 lines 27-31 describe that a 1,640 foot (500 meter) safety zone will be established around the FSRU location, and that "no fishing grounds are located in the proposed safety zone area." This is not entirely accurate. Depending on the fishing season (e.g., swordfish) commercial and sports fishermen transit and fish in the proposed FSRU area. The DEIR (page 4.3-17) further states that "no non-project vessel could enter the safety zone except due to forces beyond its control, such as heavy weather or equipment failure." If this is accurate, then permanent exclusion of fishing vessel traffic within the 500 meter safety zone will have impacts on commercial and sports fishing vessel traffic and activities. Please add an evaluation/discussion of potential impacts from the safety zone designation on fishing vessel traffic and activities to Section 4.3, or if it is discussed in another DEIR section, please add a reference to that section.

L221-11

Impact MT-2 in Section 4.3.4 contains information on the impact of the LNG carrier route through the West Tanner Banks.

Impact SOCIO-1 in Section 4.16.4 contains information on the potential decrease in catch revenues for commercial fisheries due to exclusion from fishing areas in the FSRU's safety zone.

L221-12

Since the West Tanner Banks are more than 12 NM offshore, the LNG carriers would not have any type of exclusion zone. Security zones only apply in Federal waters within 12 NM from shore. Therefore, fishers in the West Tanner Banks would not be restricted from fishing as a result of the LNG carrier transit. Fishers would have to observe the "rules of the road" when transiting near an LNG carrier.

The Applicant has also reduced the number of LNG carriers that would call on the FSRU to an annual maximum of 99 or up to two per week. As a result, no more than four LNG carrier transits (to and from) would occur in the West Tanner Banks in a week.

L221-13

As indicated in the response to Comment L221-11, Impact SOCIO-1 in Section 4.16.4 contains information on the potential decrease in catch revenues for commercial fisheries due to exclusion from fishing areas in the FSRU safety zone.

San Joaquin Valley
Air Pollution Control District

May 5, 2006

Dwight E. Sanders
California State Lands Commission
Div. of Environmental Planning and Management
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Subject: Cabrillo Port Liquefied Natural Gas (LNG) Deepwater Port –
State Clearinghouse #2004021107

Dear Mr. Sanders:

Thank you for the opportunity to comment on the Revised Draft Environmental Impact Report (EIR) for this facility. As a regulatory agency for air quality, our comments are directed to Section 4.6 of the EIR, which relates to the port's air quality impacts. We appreciate the revisions made in the EIR for the Cabrillo Port LNG Deepwater Port Project. However, we feel that there is more that needs to be done to address our specific concerns. We strongly urge that BHP Billiton LNG International Inc. and Southern California Gas Company define a narrow range of allowable values on the heating value/Wobbe Index of the natural gas in the pipeline, as supplied to the end user. Widely fluctuating heating values for natural gas directly impacts District air quality as a whole and also directly impacts the personal health of many individuals living here in the District.

L220-1

The San Joaquin Valley Unified Air Pollution Control District (District) is a continuous inter-mountain valley comprised of eight counties in the southern portion of the San Joaquin Valley of California: Fresno, Kings, Madera, Merced, San Joaquin, Tulare, and the Valley portion of Kern. The District is approximately 250 miles long, averages 80 miles wide, and is partially enclosed by the Coast Mountain range on the west, the Tehachapi Mountains on the south, and the Sierra Nevada range on the east. These surrounding mountains trap pollution. Low wind speeds combined with low-lying inversion layers in the winter create a climate conducive to the formation of high PM10 concentrations. The region's hot, dry summers are conducive to ozone formation.

The District is currently designated as serious non-attainment for the national ambient air quality standard (NAAQS) for PM10, non-attainment for the PM2.5 NAAQS, and serious non-attainment for the 8-hour ozone NAAQS. In addition to being classified as non-attainment of federal air standards, SJVAB is classified as severe non-attainment for the California ozone air quality standard and non-attainment for the California PM10 air quality standard.

L220-2

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Central Region Office
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Fresno, CA 93726-0244
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www.valleyair.org

Southern Region Office
2700 M Street, Suite 275
Bakersfield, CA 93301-2373
(661) 326-6900 • FAX (661) 326-6985

L220-1
See Table 4.2-14 for information on the Wobbe Index. Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

L220-2
Thank you for the information. The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. Section 4.6.1.3 contains revised information on Project emissions and proposed control measures. Section 4.6.4 discusses the health effects attributed to air pollutants and includes revised impacts and mitigation measures.

Based on tests conducted by South Coast Air Quality Management District (SCAQMD) on two pieces of non-residential equipment, "uncharacteristically higher heating values in natural gas could increase stationary source NOx emissions by more than 20 percent." This was noted in the EIR on page 4.6-24 lines 4 through 7. If this held true across all types of combustion equipment, operators of the combustion equipment within the District boundaries could be emitting much more NOx compared to current emission levels.

As a non-attainment area, the District is required to assess its emission inventory and source categories to determine appropriate control measures that would bring the District into attainment and then implement the identified control measures. The District Governing Board has adopted rules to limit oxides of nitrogen (NOx) emission from fossil fuel combustion devices as one strategy to reach attainment. These limits are some of the most stringent in the nation. Combustion devices within the District are required to be at or below these emission limits at all times, regardless of process input fluctuations. Operators whose equipment is out of compliance with the District's emission limits face fines for each violation. Above and beyond the consequences being out of compliance with District rules, such a NOx increase could have significant impact on air quality in the San Joaquin Valley. The District's emission inventory for NOx was assessed in the District's 2006 PM10 Plan. Based on this assessment, even a 10% increase in NOx because of higher heating value of natural gas supplied to District businesses would wipe out much of the emission reductions achieved through control measure implementation. Additionally, the reason for the EPA to impose any NAAQS is to protect the health of the population at large. The population in the District already has elevated rates of respiratory illnesses compared to the nation as a whole. The increased respiratory illnesses are attributed, at least in part, to the poor air quality experienced within the District.

For all of the reasons outlined above, we recommend that BHP Billiton LNG International Inc. and Southern California Gas Company define a narrow range of allowable values on the heating value/Wobbe Index of the natural gas in the pipeline, as supplied to the end user. They also should provide detailed information on the methods they will use to ensure the gas remains within the specified range.

District staff is available to discuss our concerns with you. If you have any questions or require further information, please contact Ms. Sandra Lowe-Leseth at (559) 230-5800.

Sincerely,

Scott Nester
Director of Planning

L220-3

L220-3
As indicated in Section 4.6.2, the natural gas imported by the proposed Project would need to meet the requirements of Rule 30 and General Order 58-A of the California Public Utilities Commission (CPUC) or it could not be accepted for distribution by SoCalGas. Rule 30, as described, has specific requirements, including a heating value range.

Section 4.6.2 contains additional information on the regulatory setting affecting air quality and a revised discussion of the heating value of imported natural gas that incorporates the recent rulemaking by the CPUC. An analysis of the impacts of the CPUC rulemaking is beyond the scope of this document as required by NEPA and the CEQA.

Our Vision Clean Air

Santa Barbara County
Air Pollution Control District

May 11, 2006

Dwight Sanders
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

RE: Revised DEIR, Cabrillo Port LNG Deepwater Port (SCH #2004021107)

Dear Dwight:

We appreciate the opportunity to review and comment on the revised draft EIR for the Cabrillo Port Liquefied Natural Gas Deepwater Port that is proposed offshore and onshore in Ventura County, and in portions of Los Angeles County, California. Like Ventura County, Santa Barbara County is part of the South-Central Coast Air Basin in which most of the project's air emissions will occur. Thus, our agency has an interest in the public health, engineering and environmental evaluation of this project. Our comments follow. L002-1

PROJECT MITIGATION L002-2

We support the California Air Resources Board's position that the project's total operating emissions, including those from the Floating Storage and Regasification Unit (FSRU) and from all associated vessels while they are in California Coastal Waters, should be fully mitigated. The project location is adjacent to and/or immediately upwind of designated federal and state ozone non-attainment areas. Considering both the typical wind rose for the project area (Fig. 4.1-1) and the regional nature of ozone formation, the project's operational emissions of ozone precursors will exacerbate areas that already do not meet federal or state health-based air quality standards. We believe the project's total ozone precursor emissions from operation should be mitigated at least on a 1:1 basis.

APPLICANT COMMITMENT TO GAS-FUELED VESSELS L002-3

While continuing to propose to use essentially natural-gas-fueled supply/tug and crew vessels, the project applicant has withdrawn its original commitment to use dedicated gas-fueled LNG delivery vessels. Instead, the project description now assumes that each LNG delivery vessel will switch over from an unspecified liquid fuel to gas-fueled operation at the 25 NM marker offshore California, operate on "boil-off gas" while making the 12-mile run to the FSRU and offloading its cargo, and then switch back to the liquid fuel at the 25 NM marker on its outbound journey. This is troubling. BHP Billiton's original commitment was both exciting and worthy of consideration, in that it would advance and demonstrate low-emissions ship propulsion technology, an issue that is critical to California's health and economic well-being. The Wartsila engines identified for use in the LNG delivery vessels are intended to operate on natural gas with 1% diesel as pilot fuel (see http://www.wartsila.com/Wartsila/docs/en/ship_power/media_publications/brochures/product/engines/w50df_ds.pdf). However, this same publication also notes that the engine can run exclusively on "heavy fuel oil," an option that would create considerably higher emissions. What was originally promised as a dedicated gas-fueled LNG delivery fleet now is considerably less of a commitment. We believe that moving away from the original commitment deserves explanation.

Terence E. Dressler • Air Pollution Control Officer
260 North San Antonio Road, Suite A • Santa Barbara, CA • 93110 • www.sbcapcd.org • 805.961.8800 • 805.961.8801 (fax)

L002-1
Thank you for the information.

L002-2
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. The following Project changes would reduce emissions of nitrogen oxide and other air pollutants:
- Reduction in the number of LNG carriers and change in crew vessel trips;
- Use of natural gas to power LNG carriers in California Coastal Waters;
- Diesel-fueled support vessels with emission controls; and
- Use of specific engine standards for onshore construction equipment.
The Applicant has committed to implement the following additional measure to reduce air emissions:
- Repowering of existing non-Project vessels with cleaner-burning engines.
These changes required revisions to air pollutant emission estimates and related air quality analyses.

Section 4.1.8.5 contains information on meteorology and climate in the Project area, including average wind speed and direction.

Section 4.6.1.3 contains revised information on Project emissions and proposed control measures, including emissions from LNG carriers operating in California Coastal Waters, as defined by the California Air Resources Board. LNG carriers associated with the Project would operate on natural gas (boil-off gas from the LNG cargo) with 1 percent diesel pilot during all operations in California Coastal Waters.

Section 4.6.4 discusses the health effects attributed to air pollutants and includes revised impacts and mitigation measures.

As discussed in Impact AIR-8 in Section 4.6.4, an ambient air impacts analysis was conducted using the Offshore and Coastal Dispersion Model to evaluate potential impacts on ambient air concentrations of pollutants at downwind locations in the Pacific Ocean and along the coast of California (see Appendix G7 for a summary of the analysis). As stated, "an air quality analysis of criteria pollutants emitted from FSRU equipment and Project vessels indicates that the projected increases in the ambient concentrations of criteria pollutants would neither violate any applicable air quality standards nor contribute substantially to existing or projected air quality violations."

This section also contains information on additional Applicant measures to reduce emissions and required mitigation measures.

L002-3
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. LNG carriers associated with the Project would operate on natural gas (boil-off gas from the LNG cargo) with 1% diesel pilot during all operations in California Coastal Waters as defined by the California Air Resources Board. Tugs and crew vessels would have diesel engines equipped air pollution control technology that would result in emissions comparable to emissions from natural gas-fueled engines.

Section 4.6.1.3 contains information on emissions from Project vessels operating in California Coastal Waters, as defined by the California Air Resources Board.

L002-4

AVAILABILITY OF GAS-FUELED VESSELS

With the prospect of up to 130 visits per year, how many gas-fueled LNG delivery vessels will be required, and will this number of vessels be ready and available to the applicant at the time of the project's start-up? Similar questions attend the availability of gas-fueled supply/tug vessels and crew vessels to which the applicant has committed. If these vessels are unavailable or only partially available, will the project's initiation be delayed until the appropriate array of gas-fueled vessels can be delivered? If there is a chance or likelihood that diesel-fueled vessels would be used by the project until gas-fueled LNG delivery vessels, supply/tug and/or crew vessels actually are available, as a matter of full disclosure, this should be accounted for in the project's air quality assessment and mitigation.

L002-5

PSD APPLICABILITY

We respectfully disagree with the EPA determination that the project is not subject to Prevention of Significant Deterioration (PSD) regulatory requirements (pg. 4.6-20). First, we note that emissions from the loading and unloading of cargo at the FSRU have not been included in the "stationary source" emissions profile of the FSRU. By Ventura County APCD's explanation of their rules (June 18, 2004 letter from Control Officer Michael Villegas to EPA's Gerardo Rios), these emissions would include any emissions from the LNG vessel while it is berthed at the FSRU and pumping LNG product into it. We also believe that supply/tug vessel emissions should be included while they are assisting the LNG delivery vessel with its cargo transfer. When properly accounted, both NOx and CO emissions from the stationary source are well over 100 tons per year.

The EPA determination holds that PSD does not apply because the FSRU does not meet the definition of one of the 28 named source categories to which PSD would apply if the source's emissions are greater than 100 tons per year. We believe this is an incorrect interpretation. One of the 28 categories is "fuel conversion plant." EPA issued a July 31, 2003 guidance memorandum intended to supersede their own 1992 guidance on PSD applicability to such operations. While the 2003 memo opines that offshore gas delivery systems are not included in the "fuel conversion plant" category, the opinion relies on the understanding that, "vaporization of LNG occurs without the need for chemical or ***process change*** that generally occurs at other sources that EPA considers as "fuel conversion plants"..." (emphasis added). The memo goes on to state that LNG vaporization is different from other fuel conversion processes, "since vaporization would occur naturally at ambient conditions without additional processing." The essential function of the FSRU is to enact a process change on the LNG that is delivered to it. In fact, the vessel contains eight large process heaters with 920 million Btu heating capacity (and considerable associated emissions) to make this process change. If the FSRU were designed to regasify LNG at ambient conditions, EPA's determination would be appropriate. Since the FSRU re-gasifies LNG by enacting a process change, we believe the FSRU is, indeed, a fuel conversion plant and PSD regulatory requirements should apply.

L002-6

SPECIFIC COMMENTS

1. At several locations throughout the draft EIR, the statement is made that "EPA has determined that the FSRU should be permitted in the same manner as sources on the Channel Islands." For clarity, we ask that you add, "...in Ventura County jurisdiction." at the end of these statements. Unlike Ventura County, projects on

L002-4

The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. The Applicant has reduced the number of LNG carriers that would call on the FSRU annually from a maximum of 130 to a maximum of 99. As a result, the number of LNG carriers docking at the FSRU weekly would be reduced from an average of two to three per week to one to two per week. Since a crew vessel would meet each LNG carrier, the number of crew vessel trips to and from Port Hueneme would also change. See Section 4.3 for more information on this topic.

The Applicant has committed to use LNG carriers that would operate on natural gas (boil-off gas from the LNG cargo) with 1% diesel pilot during all operations in California Coastal Waters. The Applicant has proposed that the LNG carriers would be comprised of a combination of purpose-built vessels (i.e., vessels constructed exclusively for the Project) and other vessels not dedicated to the Project. The Applicant has stated that contracts with vessel operators would specify that all LNG carriers would be required to be fueled exclusively by dual-fuel electric engines that conform to the emission rates provided.

Tugboats and the crew/support vessel would have diesel engines equipped with air pollution control technology that would result in emissions comparable to emissions from natural gas-fueled engines. These tugboats would be built or retrofitted specifically for the Project.

Section 4.6.4 contains information on mitigation measures intended to ensure the Applicant's proposed measures for controlling air pollutant emissions are fully implemented.

L002-5

The USEPA has jurisdiction to determine whether a prevention of significant deterioration (PSD) permit is required for the Project. Section 4.6.4 contains information on the regulatory setting associated with air quality.

Impact AIR-4 and Impact AIR-5 in Section 4.6.4 have been revised to provide specific information regarding the Applicant's emissions reduction programs and their review by the USEPA and the California Air Resources Board (CARB). As part of air permit-to-construct application procedures, the Applicant has committed to the USEPA to achieve emissions reductions (in addition to reductions inherent to the Project) to an amount equal to the FSRU's annual NO_x emissions. The Applicant has executed

contracts to retrofit two marine vessels (long haul tugs) by replacing the propulsion engines of each vessel with modern low emitting engines (Tier 2 compliant diesel-fired engines). At the request of the USEPA and the CARB, the Applicant conducted source testing to assist in determining the emission reductions expected as a result of the retrofits. Both the USEPA and the CARB have reviewed the results, but there is not yet a consensus on the estimated emission reductions from the mitigation proposal.

Based on the USEPA's and CARB's estimates, the proposed Emissions Reduction Program (AM AIR-4a) would provide for NO_X emission reductions greater than the estimated annual NO_X emissions from FSRU equipment and estimated NO_X emissions from operation of LNG carrier offloading equipment. However, the total emission reductions would be less than the annual NO_X emissions estimated for all operations (FSRU and Project vessels) in California Coastal Waters, as defined by the CARB. According to CARB, the emission reduction proposal "represents more than what would otherwise be required by the current determination of applicable regulations."

Appendix G9 contains a memorandum from the CARB to the CSLC on this topic. Electronic copies of the Applicant's reports submitted to the USEPA that detail the tug retrofits and related emission reductions are available at www.epa.gov/region09/liq-natl-gas/cabrillo-air.html.

L002-6
Section 4.6.2 contains revised text clarifying that regulatory applicability for the Project is based on the Channel Islands in Ventura County jurisdiction.

the Channel Islands in Santa Barbara County jurisdiction would be subject to New Source Review. L002-6 Continued

2. Pg. 2-21, line 24, et seq. It is noted that an estimated 4 million gallons of LNG would be consumed by the LNG delivery vessel for fuel and maintaining the cold tanks. Is this the "per-visit" usage amount to transit from 25 NM to the FSRU and back out, or does this represent some additional transit fuel use? L002-7

3. Pg. 2-22, line 6-7. We assume that the intent to run "engineers" on natural gas is a typo. Additionally, the pilot fuel is identified as "1 percent biodiesel." This statement needs clarification. First, without clarification, the implication of the sentence is that the FSRU, LNG delivery vessels and supply/tug vessels will run on the 99:1 mixture of natural gas/biodiesel *at all times*. While that would be laudable, it is clear from other sections of the document that the applicant is not committing to such a measure. Second, the use of biodiesel for pilot fuel has not been described elsewhere in the document. What is the project's expected use of biodiesel, and if biodiesel use is intended, what is the source and expected mix of the fuel? Since biodiesel blends have different emission characteristics than 100% petroleum-based diesel, have these different characteristics been accounted in the project's emission profile? L002-8 L002-9

4. Pg. 2-25, line 8, et seq. This section discusses venting of gas through a "cold stack" on the FSRU during emergencies or upsets, and indicates that the volume of gas vented during such episodes would depend on the severity of the situation. Further, it states that these vented gases would not be flared, so as to eliminate an ignition source on the FSRU. There is no discussion elsewhere in the document or appendixes that identifies or quantifies emissions from such events or that suggests mitigation measures to address what would otherwise be the unrestrained release of potentially large quantities of gas (with criteria and toxic pollutant and greenhouse gas implications). We note that, during upset conditions on petroleum production platforms operating in the offshore environment, produced gas is routed to flares with auto-ignite capability, and these flares are considered essential safety equipment. L002-10

5. Pg. 2-28, line 27. What provides the power to the four compressors of the "boil-off gas" compressor plant, and have any associated emissions been accounted to the FSRU source? L002-11

6. Pg. 4.3-38, line 37, et seq. Are the two tugboats specified throughout the Marine Traffic discussion for patrolling the FSRU's designated safety zone and the proposed "Area to be Avoided" actually the "supply/tug" vessels identified elsewhere in the document, or are these additional vessels (and associated emissions)? If they are additional vessels, have the emissions been accounted to the project? L002-12

7. Pg. 4.3-40, line 1-3. Similarly, is the "additional patrol vessel" the same as the crew boat identified elsewhere in the document, or is this an additional vessel (and associated emissions)? If it is an additional vessel, has its emissions been accounted to the project?

L002-6 Continued

L002-7
Section 2.2.2.3 contains additional information that clarifies how the 4 million gallons would be used.

L002-8
The typographical error noted in the comment has been corrected.

L002-9
Since the Applicant has not proposed exclusive use of biodiesel in Project equipment and vessels, reference to biodiesel has been removed from Chapter 2. The Applicant has proposed to use ultra low sulfur diesel (less than 15 ppm) in all Project equipment and vessels. Sections 4.6.1.3 and 4.6.4 contain information on the use of ultra low sulfur diesel in Project equipment and vessels.

L002-10
It is not possible to quantify the volume of gas that would be vented during an emergency situation.

L002-11
As described in Section 2.2.2.4, the four dual-fuel (natural gas and diesel engines [Wartsila engines]) provide primary power generation. Each "would normally operate using boil-off gas from the Moss tanks and/or natural gas that been regasified on the FSRU." These engines would fuel the "boil-off" compressor plant. Section 4.6.1.3 contains detailed information on emissions from these engines.

L002-12
The text in Section 4.3 and elsewhere in the document has been revised since issuance of the March 2006 Revised Draft EIR to clarify that the three Project support vessels consist of two tugboats and one crew/supply vessel. Section 4.6.1.3 contains revised information on Project emissions, including emissions from the two tugboats and the crew/supply vessel.

8. Pg. 4.6-14, line 6 et seq. The eight submerged combustion vaporizers will be fitted with low-NOx burners operating at 20 ppm, according to Appendix G.2 (Air Quality – Operating Emissions). However, BACT-level control (discussed on pg. 4.6-13, beginning line 32) would likely require performance in the 10 ppm or lower range. Such performance would markedly reduce the emissions from these emission units. Why is this level of control not assumed if the applicant has agreed to install BACT-level controls on stationary source-related components of the project? L002-13

9. Pg. 4.6-16, line 2-3. Would the heat exchanger systems on tugs and crew/supply vessels be run from each vessel's engines, or would this be an additional system creating additional emissions? How would the LNG be stored in these vessels? Are the vessels likely to gain Coast Guard and other necessary approvals? Gaining approval obviously affects whether or not the vessels can be delivered timely to support the project. L002-14

10. Pg. 4.6-16, line 4, et seq. There is no description of the engine array in the LNG delivery vessels. How many mains are there and what horsepower? What is the vessel propulsion system? Do the vessels have auxiliary generators in addition to the main engines? There is no indication in either Section 4.6 or Appendix G.2, but in our experience it is likely that such auxiliary generators are also present on these ships, in addition to the mains. If so, their emissions should be properly accounted. L002-15

11. Pg. 4.6-24, line 12 et seq. For the record, our agency is also concerned about the potentially significant impacts that could attend the importation into the region of natural gas that is "hotter" than what is currently marketed. The discussion appears to limit the concern to such gas burned in the South Coast Air Basin. However, as a district that only recently reclaimed our federal ozone attainment status, and one working diligently to attain state standards as well, the potential increase in ozone precursor emissions from "hot gas" is of great concern. There is little discussion of the topic in the draft EIR, and even less about how to address the matter. L002-16

12. Pg. 4.6-33, line 5, et seq. Regarding EPA's determination that PSD regulations do not apply to this project, please see comments above under "PSD APPLICABILITY." L002-17

13. Pg. 4.6-33, line 24, et seq. Based on the project's proposed location adjacent to and immediately upwind of designated federal and state non-attainment areas, we believe that the project's <u>total</u> operational ozone precursor emissions should be mitigated at least to a 1:1 basis. The mitigation basis presented here, reducing "annual emissions of NOx by an amount up to the FSRU's annual NOx emissions" does not approach 1:1 mitigation and, with the language "up to," allows significant backsliding from commitment to real mitigation. Further, it's exacerbated by the incomplete quantification of the FSRU's emissions (see PSD APPLICABILITY section above). L002-18

14. Pg. 4.6-34, line 37. The mitigation measure states the applicant will operate the mains and auxiliary engines of LNG delivery vessels, supply/tugs and crew boats on 99:1 gas/diesel fuel when within **25 miles** of the coast (emphasis added). L002-19

L002-13
The Applicant submitted an emission control analysis to the USEPA as part of its permit-to-construct application for the FSRU. The USEPA has the responsibility for issuing all relevant air permits for the FSRU and the authority to determine the appropriate level of emission controls required for the SCVs. The USEPA has not made a final decision as to whether the Applicant's proposed emission controls are consistent with BACT requirements.

L002-14
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. Tugs and crew vessels would have diesel engines equipped with air pollution control technology that would result in emissions comparable to emissions from natural gas-fueled engines.

The USCG is responsible for the enforcement of all laws and regulations on U.S. flagged vessels on the high seas and all vessels within U.S. waters. As provided in 33 CFR Part 150, the USCG may inspect the FSRU at any time for safety, security, and compliance with applicable U.S. laws and regulations. All vessels associated with Cabrillo Port would receive USCG oversight and be inspected annually.

L002-15
Section 4.6.1.3 contains updated information on the LNG carrier engine configurations and associated emissions. A combination of purpose-built vessels (those constructed exclusively for the Project) and other vessels not dedicated to the Project would deliver LNG to the FSRU. Contracts with vessel operators would require all LNG carriers to be powered exclusively by Wartsila 50DF series dual-fuel electric engines or equivalent dual-fuel electric engines. The LNG vessels would be equipped with an array of dual-fuel electric engines of varying sizes to provide power for propulsion as well as auxiliary systems on the vessel. The vessels would not be fitted with auxiliary boilers or generators.

L002-16
As indicated in Section 4.6.2, the natural gas imported by the proposed Project would need to meet the requirements of Rule 30 and General Order 58-A of the California Public Utilities Commission (CPUC) or it could not be accepted for distribution by SoCalGas. Rule 30, as described, has specific requirements, including a heating value range.

Section 4.6.2 contains a revised discussion of the heating value of

imported natural gas that incorporates the recent rulemaking by the CPUC. An analysis of the impacts of the CPUC rulemaking is beyond the scope of this document as required by NEPA and the CEQA.

L002-17
The USEPA has jurisdiction to determine whether a prevention of significant deterioration (PSD) permit is required for the Project. Section 4.6.4 contains information on the regulatory setting associated with air quality.

L002-18
Section 4.6.4 has been revised to include a description of the emission reduction projects proposed by the Applicant, including a comparison of emission reductions to Project emissions.

L002-19
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. LNG carriers associated with the Project would operate on natural gas (boil-off gas from the LNG cargo) with 1 percent diesel pilot during all operations in California Coastal Waters. Section 4.6.1.3 contains information on emissions from LNG carriers operating in California Coastal Waters, as defined by the California Air Resources Board.

However, the air quality analysis is based on gas-fueled operations within 25 **nautical miles** (emphasis added; see, for example, pg. 4.6-16, line 8). This represents a linear distance of almost 4 miles and has air quality implications. Please clarify the text and mitigation measure language to rectify the discrepancy. L002-19 Continued

15. Pg. 4.6-35, line 8 et seq. As noted previously, we support the position that total operational ozone precursor emissions should be mitigated to a minimum 1:1 level. To that end, we support continued discussions between the applicant and the California Air Resources Board to identify suitable emission reduction projects to accomplish this mitigation. We also agree with ARB that, absent a suitable long-term mitigation program to counter the total project emission increases of ozone precursors, this should be considered a Class I impact under CEQA. L002-20

We greatly appreciate the opportunity to review and comment on the environmental review document for this important project. If you have questions or require additional information regarding our input, please contact me at 805.961.8827. L002-21

Sincerely,

Peter Cantle, Manager
Engineering & Compliance Division

engr\wp\epa\lng port eir comments to slc 5-9-06.doc

cc: Amy Zimpfer, EPA/9
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Dean Simeroth, ARB
Gary Yee, ARB
Monica Schwebs, CEC
Alison Dettmer, CCC
Michael Villegas, VCAPCD
Mohsen Nazemi, SCAQMD
Bobbie Bratz, SBCAPCD
William Dillon, SBCAPCD Counsel

L002-19 Continued

L002-20
Section 4.6.4 has been revised to include a description of the emission reduction projects proposed by the Applicant, including a comparison of emission reductions to Project emissions.

L002-21
Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

398 218

South Coast
Air Quality Management District
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USCG-2004-16877-1003

FAXED: MAY 12, 2006

May 12, 2006

Mr. Dwight E. Sanders
California State Lands Commission
Division of Environmental Planning and Management
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

Docket Management Facility
U.S. Department of Transportation
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Nassif Building
Room PL-401
Washington, D.C. 20590-0001

Dear Mr. Sanders:

Revised Draft Environmental Impact Report (DEIR) for the Cabrillo Port Liquefied Natural Gas Deepwater Port State Clearing House No. 2004021107 & General Conformity Determination, Docket # USCG-2004-16877

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. SCAQMD staff has several concerns about the analysis of the air quality impacts that the proposed project would have on the South Coast Air Basin (Basin). While the offshore activity is within Ventura County, the Basin is downwind and will be directly impacted by the proposed project. In addition, the onshore pipeline will be constructed and operated within the jurisdiction of the SCAQMD. As discussed in more detail below the SCAQMD staff is also concerned about quality of natural gas as this could significantly affect the SCAQMD's progress towards achieving air quality goals in the Basin. L006-1 L006-2

Over the last decade and a half, there has been significant improvement in air quality within the Basin. Nevertheless, several air quality standards are still exceeded frequently and by a wide margin. Of the National Ambient Air Quality Standards (NAAQS) the Basin is in non-attainment for 8-hour ozone, PM10, and PM2.5. The SCAQMD regulates thousands of natural gas-fired pieces of combustion equipment. The SCAQMD staff is concerned that the quality of natural gas imported and subsequently supplied to

2006/L006

L006-1
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. The following Project changes would reduce emissions of nitrogen oxide and other air pollutants:
- Reduction in the number of LNG carriers and change in crew vessel trips;
- Use of natural gas to power LNG carriers in California Coastal Waters;
- Diesel-fueled support vessels with emission controls; and
- Use of specific engine standards for onshore construction equipment.

The Applicant has committed to implement the following additional measure to reduce air emissions:
- Repowering of existing non-Project vessels with cleaner-burning engines.

These changes required revisions to air pollutant emission estimates and related air quality analyses.

Section 4.1.8 contains a detailed description of the marine climatic setting. Section 4.6.1.2 has been revised to provide an expanded discussion of the potential transport of offshore air pollutant emissions to onshore areas due to meteorological conditions. Section 4.6.4 contains revised analyses of the impacts on air quality from the emissions of criteria pollutants, ozone precursors, and toxic air pollutants from the FSRU and Project vessels.

The air dispersion modeling analysis of the criteria air pollutant emissions from FSRU and Project vessel operational activities includes prediction of impacts at receptors located from the coastline to 2 miles inland spanning approximately 44 miles from Ventura to Malibu. Additional receptors were also placed along the coastline spanning approximately 38 miles from Malibu to the Palos Verdes Peninsula located directly south of Los Angeles.

L006-2
As indicated in Section 4.6.2, the natural gas imported by the proposed Project would need to meet the requirements of Rule 30 and General Order 58-A of the California Public Utilities Commission (CPUC) or it could not be accepted for distribution by SoCalGas. Rule 30, as described, has specific requirements, including a heating value range. Natural gas meeting these requirements would not be "hot gas," and would not create emissions above those already accounted for by the respective air districts.

Section 4.6.2 contains a revised discussion of the heating value of

imported natural gas that incorporates the recent rulemaking by the CPUC. An analysis of the impacts of the CPUC rulemaking is beyond the scope of the requirements of NEPA and the CEQA. We disagree with the comment regarding "end use" emissions for the reasons indicated in Section 4.6.2 of the document.

the local natural gas pipeline system by the proposed LNG terminal can result in an increase in NOx emissions. An increase in NOx emissions can impede the SCAQMD's progress in achieving ozone and PM10 and PM2.5 federal standards.

According to the Natural Gas Council, the single most important gas quality indicator of potential emission and safety impacts in end-user equipment is the Wobbe Index (WI). The WI of natural gas in this area has traditionally been low. Southern California Gas Company (SCGC) operators have stated that their system average WI is 1332 Btu/scf. The WI of LNG varies depending on the source, but it could be as high as 1430 Btu/scf, or 7.4 percent higher than current natural gas. The Natural Gas Council's White Paper, *White Paper on Natural Gas Interchangeability and Non-Combustion End Use*, February 28, 2005, recommends a change of no more than 4 percent in WI from the historical average. Testing conducted by SCGC shows that NO_X emissions from sensitive equipment can increase from 20 to 127 percent with hot (high WI) gas of only 1400 WI, and result in noncompliance with SCAQMD's stringent emission limits on stationary combustion sources. This is of concern since NO_X is a precursor to ozone and PM10/PM2.5, to attain these health-based air quality standards significant emission reductions are already needed from the existing levels without additional NOx emissions from the proposed project. SCAQMD staff has recommended to the California Public Utilities Commission that new LNG supplies to our area be limited to a maximum WI of 1360, in order to limit the emission impacts of hot gas in the South Coast Air Basin.

BHP Billiton states that the LNG they intend to import from Australia would be of high quality, with over 99 percent methane and not more than 1360 WI. However, they have not ruled out importing other LNGs with higher WI if necessary. If this occurs, the WI could be reduced to 1360 by injecting a small amount of nitrogen into the gas after it reaches shore. Nitrogen injection is used at the Cove Point, Maryland LNG terminal to meet gas quality specifications and is being considered to be used at the proposed Sound Energy Solutions terminal in Long Beach, in addition to the Natural Gas Liquids Recovery (LNGR) unit, consisting of a De-ethanizer and De-Methanizer, used to maintain the WI below 1360. The DEIR neglects the potential emissions impact of hot gas in the South Coast Air Basin, and must address alternatives and mitigation measures for this environmental impact. Compliance with SCAQMD's proposed 1360 WI limit would be a satisfactory mitigation measure.

Based on a letter to Mr. Bob Fletcher at the California Air Resources Board dated April 11, 2006, it is the SCAQMD staff's understanding that BHP intends to mitigate its operational NOx emissions through use of Wartsila engines on its tugs and to repower and upgrade the hull design of a tug that is used for a long haul barge hauling operation in California Coastal Waters. It is the SCAQMD staff's understanding that BHP intends to use the Wartsila 32DF engines for its tugs, a dual fuel engine that can run on either natural gas or light fuel oil.

Based on the Technology Review from Wartsila of the 32DF the stated 1.3 g/kW-hr NOx emission rate is based on operating the engine in the gas mode. If the project proponent intends to use the 32DF engines to mitigate air quality impacts or for general conformity,

L006-2 Continued

L006-3

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L006-2 Continued

L006-3

The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. Instead of fueling tugboats and the crew/supply vessel with LNG, the Applicant proposes using diesel engines equipped with air pollution control technology that would result in emissions comparable to emissions from natural gas-fueled engines. Section 4.6.1.3 contains information on the emissions associated with the diesel-fueled vessels. Section 4.6.4 contains information on the measures to be implemented to assure acheivement of stated emission levels.

the Final EIR and General Conformity Determination should provide assurance that the emission level stated is achieved, i.e. that to achieve the 1.3 g/kW-hr of NOx that BHP intends to operate the tugs in the gas mode and intends to limit use of fuel oil for the pilot. If this is not the intention of BHP, then the Final EIR and General Conformity Determination should ensure that emissions are appropriately quantified when the engine is operated in the gas or fuel oil modes.

General Conformity Comments

The SCAQMD staff is concerned that the general conformity document does not address project operational emissions in the Basin. In addition, for NOx construction emissions the document states they will be fully offset, but the mechanism is not specified.

It should be noted that Table 3 of the draft General Conformity Determination also inappropriately used the base year 2010 emission inventories for the entire Basin. The controlled Planning Inventory must be used for VOC and NOx. The correct emission inventory for the 97/99 AQMP are:

1997/1999 AQMP

10% Regional Emissions Budget (tpy)	
CO	80,000
PM10	11,200
PM2.5	n/a
NOx	19,400
VOC	15,100

Staff has been advising that conformity projects use both the 97/99 AQMP as it is the currently approved SIP and the 2003 AQMP (in the event it is approved before the final conformity determination occurs). The controlled regional emission inventory for the 2003 AQMP are:

2003 AQMP

10% Regional Emissions Budget (tpy)	
CO	105,700
PM10	10,700
PM2.5	3,900
*NOx	19,300
*VOC	11,300

(*Planning inventory)

SCAQMD staff recommends that Table 3 of the draft General Conformity Determination also list 10 tons per year (tpy) NOx thresholds for general conformity as a contingency if the Basin requests a "bump-up" to extreme. This would avoid the need to revise the document should a redesignation occur.

More detailed comments on the proposed project are attached. Please provide the SCAQMD with written responses to all comments contained herein prior to the certification of the Final EIR pursuant to Public Resources Code Section 21092.5. The

L006-3 Continued

L006-4

L006-5

L006-6

2006/L006

L006-3 Continued

L006-4
Project operational emissions are not anticipated because such emissions will not occur in the South Coast Air Basin.

L006-5
In March 2006, the USCG and MARAD solicited public input on a Draft General Conformity Determination, which concluded that NOx emissions generated from Project construction activities in Los Angeles County were subject to the General Conformity Rule. All other Project-related emissions were determined not to be subject to the General Conformity Rule. Subsequent to the issuance of the Conformity Determination, the Applicant provided a written commitment that all onshore pipeline construction equipment would, to the extent possible, utilize engines compliant with USEPA Tier 2, 3, or 4 non-road engine standards with Tier 2 being the minimum standard for any engine.

Project emissions were then reanalyzed to assess the potential emission reductions associated with the stated commitment and to reassess the applicability of the General Conformity Rule. The revised analysis contains updated information on regional emission budgets for the South Coast Air Basin. The revised General Conformity analysis concluded that all applicable Project emissions would be less than *de minimis* thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. Based on this conclusion, the USCG and MARAD will not finalize the Draft General Conformity Determination.

Section 4.6.1.3 and Section 4.6.2 contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis.

L006-6
The revised General Conformity Analysis is based on the current Federal ambient air quality designations for the South Coast Air Basin. It would be speculative to prepare an analysis that assesses Project applicability based on designations that have not yet been proposed to or approved by USEPA.

SCAQMD staff is available to work with the Lead Agency to address these issues and any other questions that may arise. Please contact me at (909) 396-3105 if you have any questions regarding these comments.

Sincerely

Susan Nakamura
Planning & Rules Manager
Planning, Rule Development & Area Sources

Attachment
SN:CB

Control Number: ODP060323-01

Revised Draft Environmental Impact Report (DEIR) for the Cabrillo Port Liquefied Natural Gas Deepwater Port

Project Construction Emissions:

According to Table 4.6-10 on page 4.6-12 of the RDEIR, the data shows the daily emissions from each phase of project construction. The table needs to be clarified to facilitate review of the proposed project's construction air quality impacts to identify the peak daily or average daily emissions, and unmitigated and mitigated emissions. If the data represents the average daily emissions, SCAQMD staff recommends that the table be revised to show estimated peak daily construction emissions. If the data represents unmitigated emissions, SCAQMD staff recommends that a second table be presented in the Final EIR showing the mitigation measures, their control efficiencies and the remaining emissions. This will facilitate the review of the project's air quality impacts and help determine the scope of the mitigation measures that would be required to reduce the emissions to less than significant levels.

L006-7

As previously indicated in this letter, the SCAQMD staff is aware of measures that the lead agency intends to implement to mitigate operational NOx emissions. The SCAQMD staff is concerned, however, that the proposed project lacks sufficient mitigation measures for construction emissions. The lead agency states on page 4.6-22 of the RDEIR that the project applicant "would fully offset NO_X emissions associated with construction activities in Los Angeles County by acquiring emission offsets or through a similarly enforceable measure so that there would be no net increase in NO_X emissions." The lead agency provides no information on these emission offsets. Given the magnitude of project emissions, it is important that the lead agency provide more specific and detailed information about the proposed measures not only to facilitate review by the public, but also to facilitate implementation and monitoring. SCAQMD staff believes it is inconsistent with CEQA and inappropriate to defer to the future an important component of the proposed project that substantially affects project emissions. Postponing the description of the mitigation measures deprives the public the opportunity to evaluate the adequacy of the mitigation measures to reduce the project's air quality adverse impacts to insignificance. In the absence of any specific information on the emission offsets, the lead agency has not demonstrated that "there would be no net increase in NO_X emissions." Please provide the detailed information as part of Table 4.6-15 in the Final EIR.

L006-8

Under MM AIR-1a and MM AIR-2b, the lead agency proposes the preparation of a Construction Emissions Reduction Plan and a Construction Fugitive Dust Plan at some future date. The lead agency states on page 4.6-29 of the Revised DEIR that these two plans will be prepared and submitted to the Ventura County Air Pollution Control District and the SCAQMD for approval prior to the commencement of construction activities. The lead agency goes on to list the mitigation measures that would be developed into the plans and implemented to reduce onshore construction emissions. Given the magnitude of project emissions, it is important that the lead agency provide more specific and detailed information about the proposed measures not only to facilitate review by the

L006-9

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L006-7

Section 4.6.1.3 provides additional information to clarify that the emission summary tables presented in this section represent the maximum daily emissions from each construction activity without the implementation of mitigation measures.

Section 4.6.4 provides additional information on specific emission reductions associated with mitigation measures.

L006-8

Impact AIR-4 and Impact AIR-5 in Section 4.6.4 have been revised to provide specific information regarding the Applicant's emissions reduction programs and their review by the USEPA and the California Air Resources Board (CARB). As part of air permit-to-construct application procedures, the Applicant has committed to the USEPA to achieve emissions reductions (in addition to reductions inherent to the Project) to an amount equal to the FSRU's annual NO_X emissions. The Applicant has executed contracts to retrofit two marine vessels (long haul tugs) by replacing the propulsion engines of each vessel with modern low emitting engines (Tier 2 compliant diesel-fired engines). At the request of the USEPA and the CARB, the Applicant conducted source testing to assist in determining the emission reductions expected as a result of the retrofits. Both the USEPA and the CARB have reviewed the results, but there is not yet a consensus on the estimated emission reductions from the mitigation proposal.

Based on the USEPA's and CARB's estimates, the proposed Emissions Reduction Program (AM AIR-4a) would provide for NO_X emission reductions greater than the estimated annual NO_X emissions from FSRU equipment and estimated NO_X emissions from operation of LNG carrier offloading equipment. However, the total emission reductions would be less than the annual NO_X emissions estimated for all operations (FSRU and Project vessels) in California Coastal Waters, as defined by the CARB. According to CARB, the emission reduction proposal "represents more than what would otherwise be required by the current determination of applicable regulations."

Appendix G9 contains a memorandum from the CARB to the CSLC on this topic. Electronic copies of the Applicant's reports submitted to the USEPA that detail the tug retrofits and related emission reductions are available at www.epa.gov/region09/liq-natl-gas/cabrillo-air.html.

L006-9

Section 4.6.4 contains updated information on the emission

reduction measures proposed by the Applicant as well as mitigation measures required by the Lead Agencies. Quanitative and qualitative information on emission mitigation is provided in this section.

public, but also to facilitate implementation and monitoring. SCAQMD staff believes it is inconsistent with CEQA and inappropriate to defer to the future an important component of the proposed project that substantially affects project emissions. Postponing the description of the mitigation measures deprives the public the opportunity to evaluate the adequacy of the mitigation measures to reduce the project's air quality adverse impacts to insignificance.

Some of the mitigation measures proposed by the lead agency under MM AIR-1a are ambiguous and may not be enforceable so SCAQMD staff recommends the following to reduce the ambiguities.

- Mitigation Measure MMAIR-1a proposes reducing emissions of diesel particulate matter and other air pollutants by using *particle* traps and other technological or operational methods. Please revise the measure to read "Reduce emissions of diesel particulate matter by using alternative clean fuel technology such as electric or compressed natural gas-powered construction equipment with oxidation catalysts instead of gasoline- or diesel-powered engines. Alternatively, reduce particulate matter emissions by using construction equipment fitted with diesel particulate filters." It should be noted that this is not a NOx mitigation measure.

- MM AIR-1a also proposes locating engines, motors and other equipment "as far as possible" from residential areas and sensitive receptors (schools, daycare centers, and hospitals). The phrase "as far as possible" is ambiguous and may not be enforceable. California Air Resources Board document "Air Quality and Land Use Handbook: A Community Health Perspective" recommends avoiding siting new sensitive land uses within 300 feet of facilities such as dry cleaning operation or a large gas station. Since these facilities emit similar toxics as engines, motors and generators, SCAQMD staff recommends that a minimum buffer of 300 feet is maintained between engines, motors and generators on the one hand and sensitive receptors on the other, along the proposed pipeline routes. See Table 4.17-6 on pages 4.17-19 and 4.17-20 of the RDEIR which shows several medium-density residential areas through which the Pipeline 225 Loop Preferred Route would be passing.

- MM AIR-1a also proposes reducing construction-related trips of workers and equipment, including trucks, but does not state how those vehicle trips can be reduced. SCAQMD staff recommends providing shuttles and vans to transport construction workers to and from construction sites thus eliminating some of the individual private vehicle trips and the exhaust emissions related to vehicle trips. The contractor may also arrange for food catering trucks to visit the project site about twice a day.

Health Risk Assessment:

- The SCAQMD staff recommends that the lead agency conduct an HRA on the operational emissions from the project. The DEIR neglects to include an analysis of the potential cancer and non-cancer risk from operations of the project. Even with the

L006-9 Continued

L006-9 Continued

L006-10

L006-10

Section 4.6.4 contains updated information on Applicant proposed measures and required mitigation measures to reduce air pollutant emissions from construction activities. Mitigation measures requiring the use of add-on pollution control equipment have been either deleted or modified based on Applicant commitments and mitigation measures requiring the use of equipment compliant with USEPA Tier 2 and Tier 3 nonroad engine standards.

L006-11

L006-11

Section 4.13, Land Use, contains information on the location of sensitive receptors (including schools, day care, and hospitals) in relation to the proposed onshore pipeline routes in Ventura and Los Angeles Counties. None of the sensitive receptors are located within 300 feet of the boundary of the pipeline right-of-way. However, Section 4.6.4 contains updated information on mitigation measures that restrict the operation of construction equipment in proximity to schools, day care centers or hospitals.

Section 4.6.4 also conatins information on the potential air quality impacts associated with onshore construction activities.

L006-12

L006-12

Section 4.6.4 contains updated information on mitigation measures to reduce the potential number of worker vehicle trips associated with construction activities.

L006-13

L006-13

Impacts AIR-2, AIR-8 and AIR-9 in Section 4.6.4 contain information on a health risk analysis of emissions from Project operational equipment and vessels. The analysis concluded that these impacts would not expose the public or sensitive receptors to substantial pollutant concentrations. A more detailed discussion of these factors and other results is provided in the health risk analysis summary in Appendix G6.

fuel limitations, the SCAQMD staff is concerned that the cancer risk from these large diesel-fueled engines could exceed the 10 in a million significant risk.

- The SCAQMD staff currently has no protocol to estimate the cancer risk from construction projects that are less than one year in duration and therefore has no comments on the HRA conducted for the construction portion of the proposed project.

Construction Criteria Concentration Impacts:

- Localized construction criteria pollutant impacts in the Final EIR should be completed using the SCAQMD's LST methodology, which can be found on the SCAQMD website at http://www.aqmd.gov/ceqa/handbook/LST/LST.html.
- Stack diameters appear to be estimated from estimated flow rate and an assumed stack velocity. Stack diameters range from 0.45 to 0.61 meters (1.5 to 2.0 feet). These stack diameters appear to be over-estimated. Since stack diameter impacts momentum flux, the stack diameters should be re-evaluated in the Final EIR based on actual construction equipment stack diameters.
- The background concentration source is not identified. Background concentrations for construction in Los Angeles in the Final EIR should be represented by the closest monitoring station area, which would be SRA 13, Santa Clara Valley.
- No map identifying sensitive receptors is included in the analysis. The closest receptors to the construction areas should be identified. A map that identifies sensitive receptors should be included in the Final EIR.
- Adjustments have been made to the annual multiplying factor presented in the Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised, EPA-454/R-92-019, October 1992. SCAQMD staff does not recommend making adjustments to annual multiplying factors. Concentrations should be estimated without any adjustment to the annual multiplying factor. If the construction duration is so short that an annual multiplying factor does not adequately represent the project, an annual impact analysis may not be relevant.

The Offshore and Coastal Dispersion (OCD) Model:

It is not clear how the emission rates used in the OCD model for criteria pollutants during operation were developed. The Final EIR should include calculations that demonstrate how the emission rates were developed. It is also not clear how release parameters from ocean vessels were developed for the OCD model analysis. The Final EIR should demonstrate how release parameters were developed or cite reference sources for these parameters.

L006-13 Continued

L006-14

L006-15

L006-16

L006-17

L006-18

L006-19

L006-20

L006-13 Continued

L006-14
See the response to Comment L006-13.

L006-15
Section 4.6.4 contains updated information on an air quality analysis of criteria pollutant emissions from onshore construction activities in Los Angeles County. This analysis incorporates procedures outlined in SCAQMD Localized Significance Threshold guidance.

L006-16
The air quality analyses used to evaluate impacts from construction activities were based on a single merged stack approach. These air quality analyses have been updated with refined models to incorporate stacks representative for individual construction equipment. Section 4.6.4 contains information on air quality impacts from construction equipment. Appendices G5 and G6 contain more detailed information on air quality analyses associated with construction equipment.

L006-17
Appendix G5 contains the air quality analysis of criteria air pollutant emissions from construction activities that would occur in Los Angeles County. The air quality impacts included in this analysis incorporate background data for CO, NO_2, and PM_{10} from Santa Clara Valley. Background data for SO_2 was based on the maximum of all Los Angeles County as SO_2 is not monitored at the Santa Clara Valley Station. Background data for $PM_{2.5}$ was based on data from the West San Fernando Valley station as $PM_{2.5}$ is not monitored at the Santa Clara Valley Station.

L006-18
Section 4.13, Land Use, contains maps of the locations of sensitive receptors located along the proposed Center Road Pipeline Route in Ventura County and the proposed Line 225 Loop Pipeline Route in Los Angeles County.

L006-19
Appendix G5 contains the air quality impact analysis of criteria air pollutant emissions from construction equipment. Due to the anticipated duration of the construction activities, this air quality impact analysis does not include an assessment of annual ambient impacts.

L006-20
Appendix G7 contains the air quality impact analysis of criteria pollutant emissions from the FSRU and Project vessels. The calculations used to develop the stack parameters are included in this analysis. Emission rate calculations for FSRU equipment and Project vessels are presented in Appendices G2 and G3.

L224

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Michael Villegas
Air Pollution Control Officer

May 10, 2006

Carl Morehouse
Ventura County Planning Division
800 South Victoria Avenue
Ventura, CA 93009

Subject: Review of Revised Draft Environmental Impact Statement and Environmental Impact Report for the Cabrillo Port Liquefied Natural Gas Deepwater Port, United States Coast Guard, Maritime Administration, and California State Lands Commission (Reference No. 04-095-1)

Dear Mr. Morehouse:

Air Pollution Control District staff has reviewed the revised project draft environmental impact statement and environmental impact report (DEIR) for the Cabrillo Port natural gas deepwater port. Several changes have been made to the project description from the previously circulated October 2004 DEIR. Changes to the air quality chapter include recalculation of air emissions from stationary source generator engines, establishing the project under air quality permitting standards as the Channel Islands (specifically Anacapa and San Nicolas Islands that have been designated as attainment/unclassifiable), and a commitment to achieve NOx reductions both onshore and offshore. The following comments address changes to the air quality chapter, applicable appendices, and general comments on the DEIR.

Project Emissions

- Use of natural gas as the primary fuel in the main and auxiliary engines on the LNG carriers, tug supply boats, and crew boats when berthed at the Floating Storage and Regasification Unit (FSRU) or operating within 25 miles of the coast of California is proposed. However, there are no estimates of potential emissions reductions in Ventura County. The discussion of AM AIR-51, *Natural Gas Only on Project Vessels* (Page 4.6-34, Line 33) should be expanded to present and document vessel emissions reductions that would occur off shore Ventura County. L224-1

- The discussion of AM AIR-5b, *Reduced Vessel Traffic Between the FSRU and Port Hueneme,* (Page 4.6-35, Line 1), should be revised to quantify the reductions of the number of weekly and annual transits made by the crew boats/supply boats to and from Port Hueneme and the FSRU from the original L224-2

2006/L224

L224-1
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. Section 4.1.8 contains a detailed description of the marine climatic setting. Section 4.6.1.2 has been revised to provide an expanded discussion of the potential transport of offshore air pollutant emissions to onshore areas due to meteorological conditions. Section 4.6.4 contains revised analyses of the impacts on air quality from the emissions of criteria pollutants, ozone precursors, and toxic air pollutants from the FSRU and Project vessels.

The air dispersion modeling analysis of the criteria air pollutant emissions from FSRU and Project vessel operational activities includes prediction of impacts at receptors located from the coastline to 2 miles inland spanning approximately 44 miles from Ventura to Malibu. Additional receptors were also placed along the coastline spanning approximately 38 miles from Malibu to the Palos Verdes Peninsula located directly south of Los Angeles.

Section 4.6.4 has been revised to include a description of the emission reduction projects proposed by the Applicant. This section also contains information on other Applicant measures to reduce emissions and required mitigation measures.

The only Project vessels to operate in Ventura County waters would be the two tugboats and the one crew/supply vessel.

L224-2
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. The Applicant has reduced the number of LNG carriers that would call on the FSRU annually from a maximum of 130 to a maximum of 99. As a result, the number of LNG carriers docking at the FSRU weekly would be reduced from an average of two to three per week to one to two per week. Since a crew vessel would meet each LNG carrier, the number of crew vessel trips to and from Port Hueneme would also change. See Section 4.3 for more information on this topic. Section 4.6.1.3 contains information on emissions from Project vessels operating in California Coastal Waters as defined by the California Air Resources Board.

estimates in the October DEIR. Specifically, we request an estimate of the weekly and annual number of crew boats/supply boats and estimates of their emissions.

- The air quality chapter of the DEIR should include a summary table of construction and operational emissions similar to Table 1 of Appendix G4, General Conformity/Determination, *Summary of Construction Emissions (Direct and Indirect Emissions)*. This table should display construction and operational emissions for Ventura County, Los Angeles County and Federal waters.

Project Mitigation

Section 4.6.4 of the DEIR addresses project impact analysis and mitigation. The mitigation measures discussed in this section should be expanded to provide more detail. The mitigation measures are not concrete enough to ensure that mitigation will actually occur or be effective and therefore are deficient under the California Environmental Quality Act. Specific recommendations follow:

- Section AM AIR-2a a (Page 4.6-30, Line 15) addresses fugitive dust controls for onshore construction activities. We recommend this section be expanded to include street sweeping and trackout devices.

- Mitigation Measure MMAIR-2b presents a Construction Fugitive Dust Plan (Page 4.6-30, Line 7). We recommend this measure be revised to state that: "At a minimum, the control measures specified in the Construction Emissions Reduction Plan shall conform to all applicable requirements of SCAQMD Rule 403, for construction activities in both Ventura and Los Angeles Counties."

- The applicant has proposed an Emissions Reduction Program (in addition to reductions inherent to the project) that would reduce annual emissions of NOx by an amount inherent to the stationary source emissions. The details of this mitigation project(s) have not been released in sufficient detail regarding the amount of tons/year, and where (in a county by county analysis) to determine if the reductions will occur. We are concerned how the proposed mitigation will be enforced, i.e., a Port license agreement, air permit condition, and the term of the mitigation (temporary or permanent). We request AM AIR-4a, *Emissions Reduction Programs* (Page 4.6-33, Line 24), be expanded to provide detail on these issues.

- The Mitigation Measure for Impact AIR-5, *Emissions of Ozone*

L224-2 Continued

L224-3

L224-4

L224-5

L224-6

L224-7

L224-2 Continued

L224-3
Section 4.6.1.3 contains information on the daily and total emissions associated with proposed construction activities and the annual emissions associated with proposed operational activities.

L224-4
The suggested changes to air quality mitigation measures are discussed individually in the responses below.

L224-5
Section 4.6.4 contains updated information on mitigation measures to control fugitive dust. The Construction Fugitive Dust Plan has been expanded to include requirements for street sweeping and trackout devices.

L224-6
Section 4.6.4 contains updated information on mitigation measures to control fugitive dust. The Construction Fugitive Dust Plan shall conform to all applicable requirements of SCAQMD Rule 403 for construction activities in both Ventura and Los Angeles counties.

L224-7
Impact AIR-4 and Impact AIR-5 in Section 4.6.4 have been revised to provide specific information regarding the Applicant's emissions reduction programs and their review by the USEPA and the California Air Resources Board (CARB). As part of air permit-to-construct application procedures, the Applicant has committed to the USEPA to achieve emissions reductions (in addition to reductions inherent to the Project) to an amount equal to the FSRU's annual NO_X emissions. The Applicant has executed contracts to retrofit two marine vessels (long haul tugs) by replacing the propulsion engines of each vessel with modern low emitting engines (Tier 2 compliant diesel-fired engines). At the request of the USEPA and the CARB, the Applicant conducted source testing to assist in determining the emission reductions expected as a result of the retrofits. Both the USEPA and the CARB have reviewed the results, but there is not yet a consensus on the estimated emission reductions from the mitigation proposal.

Based on the USEPA's and CARB's estimates, the proposed Emissions Reduction Program (AM AIR-4a) would provide for NO_X emission reductions greater than the estimated annual NO_X emissions from FSRU equipment and estimated NO_X emissions from operation of LNG carrier offloading equipment. However, the

total emission reductions would be less than the annual NO_X emissions estimated for all operations (FSRU and Project vessels) in California Coastal Waters, as defined by the CARB. According to CARB, the emission reduction proposal "represents more than what would otherwise be required by the current determination of applicable regulations."

Appendix G9 contains a memorandum from the CARB to the CSLC on this topic. Electronic copies of the Applicant's reports submitted to the USEPA that detail the tug retrofits and related emission reductions are available at www.epa.gov/region09/liq-natl-gas/cabrillo-air.html.

Precursors from Project Vessels Operating in California Coastal Waters, (MM AIR-5c, Page 4.6-35, Line 8), states that the applicant shall continue to consult with the California Air Resources Board to identify emission reduction opportunities. This mitigation measure cannot be relied on as a mitigation measure at this point in the DEIR because it is deferring project impact mitigation to a future time. The California Environmental Quality Act (CEQA) generally does not recognize as adequate a mitigation measure that relies on future review or further consultation or study (CEQA Guidelines section 15126.4(a)). Therefore, this issue must be resolved before the DEIR is finalized.

- Impacts AM AIR-4a and AM AIR-5a found in Table 4.6-20, *Summary of Air Quality Impacts and Mitigation Measures* (Page 4.6-39), do not provide enough detail on how the mitigation measures would achieve reductions. These mitigation measure summaries should be revised to explain in greater detail how the reductions would be achieved. For example, specific numbers should be listed where it states that the number of vessel transits would be reduced by half.

Air Toxics Analyses

Section Impact AIR-7, *Temporary Ambient Air Quality Impacts Caused by Air Pollutant Emissions from Onshore and Offshore Construction Activities* (Page 4.6-37, Line 1), includes a discussion of air toxic contaminants, with air toxics modeling documentation in three appendices. The DEIR contains three air toxics studies: criteria pollutants during the construction phase of the project (Appendix G5), health risk assessment for onshore pipeline construction (Appendix G6), and ammonia emissions generators during operation (Appendix G8).

- Air modeling was done using the United States Environmental Protection Agency (EPA) SCREEN3 model for criteria pollutants from construction and ammonia emissions from operation, and the EPA ISCST3 model was used for the risk assessment for construction activities. The models used are appropriate for onshore construction activities, however we are not certain that SCREEN3 is appropriate for offshore activities. SCREEN3 can model "shoreline fumigation," but this is only applicable for stacks ten meters or higher. None of the construction activities involve stacks that high. The generator stack used in the ammonia calculation is higher than this, but the impacts are being calculated for offshore locations; no shoreline crossing is involved. Therefore, justification should be provided for use of SCREEN3, and not other EPA-approved models designed for modeling offshore activities should be provided.

L224-7 Continued

L224-8

L224-9

L224-7 Continued

L224-8
AM AIR-4a in Section 4.6.4 includes updated information on emission reduction measures proposed by the Applicant and required mitigation measures. Section 4.6.1.3 contains Project emission summaries that incorporate emission reduction measures proposed by the Applicant.

L224-9
The air quality analysis used to evaluate impacts from offshore construction activities, which was based on SCREEN3, was refined to incorporate use of the Offshore and Coastal Dispersion Model (OCD) to estimate impacts from offshore construction equipment. Section 4.6.4 contains updated information on air quality impacts. Appendix G5 contains more detailed information on the air quality analysis of onshore and offshore construction equipment.

- The modeling study to assess compliance with ambient air quality standards during the construction phase of the project looked individually at seven different construction activities, both offshore and onshore. Each construction activity involves use of multiple internal combustion engines. For screening purposes, the stacks were combined into a single "virtual stack" that was to be equivalent to the "average" engine stack. The EPA has guidelines for merging stacks into a representative stack (Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised; EPA-454/R-92-019; October 1992). It is not clear whether the EPA guidelines were used for the virtual stack. We recommend EPA guidelines be used for merging stacks into the representative stack for project construction modeling. L224-10

- For the fugitive dust scenario, only stability classes that occur during daytime hours were used in the dispersion modeling because pipeline construction would only occur during the day. It seems that this could apply to other construction activities, but full meteorology was used for everything but fugitive dust. For fugitive dust from trenching, concentrations were not calculated parallel, or nearly parallel, to the longer side of the 30 x 200 meter area used to model the dust emissions. The reason stated for this was it would likely fall within the pipeline corridor and be inaccessible to the public. Please provide an explanation how this would occur. L224-11

- For pipeline construction, risks were calculated separately for each construction activity and compared to the District's significance level. The calculated risks were based on the actual amount of time that each activity would occur at a location. We do not understand the pipeline construction well enough to know whether this approach is appropriate. It is assumed that the various activities must occur at or near the same locations. The way that the risk assessment was done, if the activities occur at or near the same locations either simultaneously or sequentially, we recommend the risks be summed for calculating long-term impacts. L224-12

- The health risk assessment was performed to determine the health impact from diesel engine emissions from the onshore construction activities. Each construction activity was modeled separately and the impacts were reported separately. The Office of Environmental Health Hazard Assessment (OEHHA) recommends that a minimum period of nine years be used for calculating risks from short-term impacts, rather than the shorter time periods used in the health risk assessment. The District depends on OEHHA for expertise on health effects issues. Therefore, we recommend that a minimum of nine years be used for the health risk assessment. Implementation of this L224-13

L224-10
The air quality analyses used to evaluate impacts from construction activities were based on a single merged stack approach. These air quality analyses have been updated with refined models to incorporate stacks representative for individual construction equipment. Section 4.6.4 contains information on air quality impacts from construction equipment. Appendices G5 and G6 contain more detailed information on air quality analyses associated with construction equipment.

L224-11
The air quality analysis used to evaluate fugitive dust impacts from onshore construction activities, which was based on SCREEN3, was refined to incorporate use of the Industrial Source Complex Model (ISC3) to estimate fugitive dust impacts from onshore construction equipment. The refined analysis accounts for impacts in all directions from potential construction sites.

Section 4.6.4 contains updated information on air quality impacts. Appendix G5 contains more detailed information on the air quality analysis of onshore construction equipment.

L224-12
Section 4.6.4 contains information on the risk analysis of toxic air contaminant emissions from Project construction activities. The various activities associated with onshore pipeline installation (i.e., trenching, pipelay, boring/drilling) would occur at different times along the pipeline route. For assessment of acute (short-term) impacts, each activity was evaluated separately. The assessment of chronic impacts was based on the additive impact of each piece of construction activity equipment. Appendix G6 contains more detailed information on the risk analyses associated with onshore construction equipment.

L224-13
Section 4.6.4 contains updated information on a risk analysis of the impacts of toxic air contaminants emitted from onshore construction activities. The risk analysis was used to assess the potential acute (short-term) and chronic exposures based on expected durations of construction activities (relative to exposure to any single receptor). The various activities associated with onshore pipeline installation (i.e., trenching, pipelay, boring/drilling) would occur at different times along the pipeline route. Construction activities are not expected to impact any one receptor for more than 60 days (and for most receptors, a much shorter time period). For assessment of acute impacts, each activity was evaluated separately. The assessment of chronic impacts was based on the additive impact of

each piece of construction activity equipment.

As indicated in the published guidance, the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA) does not support the use of current cancer potency factors to evaluate cancer risk for exposure of less than 9 years. If such risk must be evaluated, OEHHA recommends assuming that average daily dose for short-term exposure is assumed to last for a minimum of 9 years. In the absence of cancer potency factors for short term exposure, the OEHHA cancer potency factors have been used to assess a conservative but reasonable exposure duration for the activity of interest. Given the short duration of impacts on any one receptor, the approach of assuming 9 years of exposure is expected to greatly overestimate the potential long-term cancer risks to sensitive receptors and the general public. Details of the health risk analyses are summarized in Appendix G6.

would depend on how pipeline construction actually occurs. If the activities occur sequentially, calculating the risk from each activity as if it occurs for nine years and then summing them would be a huge overestimate. In this case, the worst case activity, assumed to occur for nine years, could be used to represent the entire impact of the construction activity. The actual risk would not be higher than this. If some of the activities occur simultaneously, the worst case risk should be based on the maximum amount of equipment that will operate at the same time in the same area, again assuming nine years of operation. The worst case combination of activities, assumed to occur for nine years, could be used to represent the entire impact of the construction.

L224-13 Continued

- The health risk assessment used the California Air Resources Board HARP model. The same "virtual stack" was used as in the construction activities described above. The HARP model includes the EPA ISCST3 dispersion mode, which can easily handle multiple stacks. It is therefore unclear why the "virtual stack" was used for the risk assessment. The same comments on the correctness of the use of the combined stack apply as for the construction activities.

L224-14

- The maximum risk was reported as 0.3 in a million for the trenching activity, based on 180 days exposure. If the lifetime excess cancer risk were based on nine years exposure per OEHHA recommendations, it would be approximately six in a million. We recommend this conclusion be included in the discussion.

L224-15

- District staff re-ran the health risk assessment model for trenching using the inputs provided and was unable to duplicate their results. Our modeling run actually got lower risk numbers than reported. The maximum calculated 70-year risk was 25 in a million vs. the reported value of 45 in a million.

L224-16

General Comments

- The "State" section of Table 4.6-15, *Major Laws, Regulatory Requirements, and Plans for Air Quality* (Page 4.6-20), should be expanded to include a discussion of the California Environmental Quality Act.

L224-17

- The "Local" section of Table 4.6-15, *Major Laws, Regulatory Requirements, and Plans for Air Quality* (Page 4.6-21), should include the Ventura County Air Pollution Control District Rule 51, *Nuisance.*

L224-18

- Section 4.6.4, *Impact Analysis and Mitigation,* (Page 4.6-25, Line 3), describes air quality impacts and mitigation measures. We recommend a brief explanation of

L224-19

L224-13 Continued

L224-14
The air quality analyses used to evaluate impacts from construction activities were based on a single merged stack approach. These air quality analyses have been updated with refined models to incorporate stacks representative for individual construction equipment. Section 4.6.4 contains information on air quality impacts from construction equipment. Appendices G5 and G6 contain more detailed information on air quality analyses associated with construction equipment.

L224-15
See response to Comment L224-14.

L224-16
The health risk analysis has been revised since issuance of the March 2006 Revised Draft EIR. Impact AIR-9 in Section 4.6.4 contains updated information on the health risk analysis associated with construction equipment. Appendix G6 contains detailed information on the revised health risk analysis.

L224-17
Sections 1.0 and 4.1 contain information on the California Environmental Quality Act and associated requirements.

L224-18
Section 4.6.2 has been updated to include information on VCAPCD Rule 51: Nuisance.

L224-19
Section 4.6.4 contains updated information on air quality impacts. Section 4.1.4 contains an explanation of the definition of Class I, II, and III impacts.

L224-19 Continued

each impact class (Class I, II, or III) be provided to supplement this description and the material in Table 4.6-5.

L224-19 Continued

If you have any questions, please call Chuck Thomas of my staff at (805) 645-1427.

Sincerely,

Michael Villegas
Air Pollution Control Officer

L208

2006/L208

Office of
AGRICULTURAL COMMISSIONER
P.O. Box 889, Santa Paula, CA 93061
815 East Santa Barbara Street
Telephone: (805) 933-3165, (805) 647-5931
FAX: (805) 525-8922

Agricultural Commissioner
W. Earl McPhail

Chief Deputy
David Buettner

DATE: March 31, 2006

TO: Carl Morehouse, County of Ventura, Planning Division

FROM: Rita Graham, Office of Agricultural Commissioner RG

SUBECT: RMA Reference No. 04-095-1, Outside Environmental Document Review, Cabrillo Port Liquefied Natural Gas Deepwater Pork, Revised Draft EIR/EIS

Thank you for the opportunity to comment on RMA Ref # 04-095-1, (Cabrillo Port Liquefied Natural Gas Deepwater Port, lead agency: California State Lands Commission – Revised Draft EIR/EIS. Comment deadline is April 25, 2006.

Project Description: Significant new information is being added to the EIR published in October 2004 and circulated for public comment. Based on comments received, the applicant revised key elements of the project including (1) FSRU (floating storage and regasification unit) Dimensions are larger, 971 feet, (2) New Offshore Pipeline Route to reduce the potential for turbidity flows, (3) Pipeline Installation at Shore Crossing will use horizontal directional boring instead of horizontal directional drilling beneath the shore; vessels used would be anchored; cofferdams would not be used, (4) New Onshore Pipeline Route Segment Near Center Road Station, Ventura County, (5) Gas Odorant injection, (6) Alternative – new information related to dual mooring.

Only item (4) *New Onshore Pipeline Route Segment Near Center Road Station, Ventura County,* affects the Ventura County Agricultural Commissioner's area of review.

According to the EIS/EIR, onshore pipeline construction is expected to begin in the first quarter of 2009 and to require approximately nine months to complete. The Ventura County portion of the project calls for 14.7 miles of new 36-inch diameter pipeline, and is referred to as the Center Road Pipeline. The pipelines would be constructed, owned, and operated by SoCalGas. One project alternative is referred to as the Gonzales Road Pipeline, extending from the Mandalay Generating Station in northwest Oxnard, along Gonzales Road, which is an agricultural area until it meets the City of Oxnard; it is then residential and industrial. The Gonzales Road Pipeline alternative results in less impact to agriculture than the preferred project description. Other project alternatives involve offshore placements or "no project."

Onshore pipeline construction would typically proceed at 300 to 500 feet per day through city streets and up to 600 to 700 feet per day through agricultural areas, including orchards (primarily at the northern end of the Center Road pipeline). The final four weeks of the construction period would be used for testing and final tie-ins. Onshore pipeline construction would occur six days per week (Monday through Saturday), from 7 a.m. to 7 p.m. Best management practices would include reduction or elimination of pollutants in runoff from their construction projects, sediment control, non-storm discharge control, and erosion control and soil stabilization. A construction

workforce of approximately 100 to 120 personnel for each pipeline (Ventura County and Los Angeles County) would be employed on the Project during the peak construction period.

During construction, temporary construction easements and workspaces would be established. In agricultural areas, SoCalGas would obtain a temporary construction easement to secure adequate workspace. These would be 80 – 100-foot wide ROWs. Once the construction schedule is developed, SoCalGas would engage in pre-construction discussions with farmers and landowners to notify them in advance when construction would occur on their property to minimize impacts to their crops or to planting or harvesting operations. Construction of the pipeline within the existing paved roads would require temporary closure of at least one lane. No farmland will be permanently removed by construction of the pipeline. The expansion of the Center Road Valve Station would result in the permanent loss of approximately 0.9 acres of prime farmland soil.

At the onshore point of connection until it reaches the point of origin within the county, as described above, the proposed pipeline will abut land currently within the jurisdiction of the County of Ventura but within the City of Oxnard Sphere of Influence (SOI) and City Urban Restriction Boundary (CURB). Where development occurs within a city SOI or CURB, the land is considered *in transition to urban development* and the development standards of the city are applicable.

Project Location: The onshore pipeline would be constructed through a largely agricultural area, with several portions within the review jurisdiction of the County of Ventura. The precise location of the onshore pipeline alignments, e.g., which side of the street, is not currently known. Routes through unincorporated Ventura County are shown in **bold** below:

- Begin at the new metering station within the Reliant Energy Ormond Beach Generating Station;
- Run north along the Southern California Edison electric transmission line ROW;
- **Turn east on Hueneme Road, north on Nauman Road, west on Etting Road, and north on Halles Road to Pleasant Valley Road (County jurisdiction starts near Olds Road**
- **At Pleasant Valley Road, head southwest for approximately 1,000 feet (305 m) and then turn north through agricultural fields (County jurisdiction stops at East5th Street/ SR-34)**
- Continue north along Del Norte Boulevard, and cross Sturgis Road to U.S. 101 (Ventura Freeway);
- Turn east along the U.S. 101 frontage road, then turn north and cross U.S. 101
- **Proceed northeast to Central Avenue, then southeast along Central Avenue and northeast along Beardsley Road;**
- **Head northeast for approximately 0.25 mile (0.4 km), then northwest along a flood control channel (the Santa Clara Diversion) to Santa Clara Avenue;**
- **Follow adjacent to Santa Clara Avenue northeast to SR-118 (Los Angeles Avenue);**
- **Head northwest along SR-118 for approximately 0.4 mile (0.6 km) to just before Clubhouse Drive, then head northeast for approximately 1.1 mile (1.8 km) and east for approximately 0.55 mile (0.9 km) along an unpaved road and Center Road (this segment of the proposed pipeline route differs from that described in the October**

2004 Draft EIS/EIR; and

- **Terminate at the Center Road Valve Station**

Comments:

Area of Review: Ventura County Initial Study Assessment Guidelines (2000 ed.), Item 7 Agricultural Resources (a) Soils, (b) Water, (c) Air Quality/Micro Climate, (d) Pests/Diseases, (e) Land Use Incompatibility, for project locations within unincorporated Ventura County only.

Item 7a Soils. According to the EIS/EIR, only 0.9 acres of agricultural land will be permanently removed from production and converted to non-agricultural use (expansion of the Center Road Valve Station). Pipeline construction will not permanently convert any agricultural land. However, the EIS/EIR states that construction, compaction of the soil could be increased, and some fertility could be reduced due to soil mixing. Applicant intends to salvage and replace topsoil. The thresholds of significance under the Ventura County Initial Study Assessment Guidelines (2000 ed.) are 5 acres of soil designated as Prime/Statewide Importance, 10 acres of soil designated as Unique, or 15 acres designated as Local on the California Department of Conservation Farmland Mapping and Monitoring Program *Ventura County Important Farmland 2004* map (IFI map), and these thresholds will not be exceeded. Therefore, the revised project will not cause a significant impact to Agricultural Resources – Soils, under the Ventura County standards. The finding is **less than significant impacts**.

Item 7b Water. According to the EIS/EIR, project use of water will be limited to temporary construction activities such as dust suppression, and there is no indication that any water earmarked for agriculture will be used. The significance threshold under Ventura County standards states generally that any proposed non-agricultural land use or development that is proposed to use the same water resources as agriculture will have an impact. Therefore, the revised project will not cause a significant impact to Agricultural Resources – Water under the Ventura County standards. The finding is **less than significant impacts.**

Item 7c Air Quality / Micro Climate. According to the EIS/EIR, the project will produce construction dust. The threshold of significance in the EIS/EIR is whether the project would *impair the productivity of adjacent agricultural areas.* The thresholds of significance under Ventura County standards is any use that will cause a 10 percent or greater increase in dust on agricultural parcels, a 10 percent decrease in solar access, removal of any tree row, or other use that would cause a substantial adverse change in an agricultural area's air quality and/or microclimate. Any project within one-half mile of agricultural areas is presumed to have some impact. However, construction dust is considered to cause less than a 10 percent increase in dust. Construction activities will not cause any decrease in solar access to crops. The EIS/EIR states that trees will be removed in areas adjacent to the new pipeline, up to 2,400 trees, some of which may be tree rows planted to create micro climates. Therefore, the revised project will cause a significant impact to Agricultural Resources – Air Quality / Micro Climate. The finding is **potentially significant impacts.** Under Ventura County standards, the project requires a mitigation measure that would lessen the impact to less than significant or a statement of overriding considerations. The EIS/EIR states that the applicant will implement a plan to suppress dust with potable water sources or water sources approved for discharge near

L208-1

L208-1
Thank you for your evaluation of impact significance based on Ventura County criteria.

agricultural uses. Therefore, the finding is **less than significant impacts.**

Item 7d Pests/Diseases. According to the EIS/EIR, the project will have no permanent onshore above ground structures or uses in Ventura County other than an existing valve station that will be expanded by 16,000 square feet to 40,000 square feet. Therefore, no permanent sources for the introduction of agricultural pests or diseases will occur. The EIS/EIR states that construction of the pipeline could cause noxious weeds to be introduced; however, the applicant would implement a weed management plan and a dust suppression plan using potable or other approved water sources. The thresholds of significance under Ventura County standards is any proposed non-agricultural land use or development located on or within one-half mile of property currently in or suitable for agricultural production is presumed to have some impact. Development that could cause a substantial increase in or the introduction of pests and/or disease in an agricultural area will have a significant impact. Therefore, with the implementation of a weed management plan and dust suppression measures, the finding is **less than significant impacts.**

7e Land Use Incompatibility. According to the EIS/EIR, the project location will include areas within unincorporated Ventura County zoned for agricultural exclusive uses ("AE" zoning). In all zoning categories, only aboveground pipelines are regulated for land use compatibility by the Ventura County Resource Management Agency Planning Division. Underground pipelines are subject to regulation by the Building and Safety Division, the Public Works Agency and Environmental Health Division. Pipeline construction activities that affect agriculture are subject to CEQA review by the Ventura County Agricultural Commissioner's Office. The onshore pipelines would be installed in existing roadways or shoulders; however it would also traverse agricultural fields in certain locations. According to the Ventura County Initial Study Assessment Guidelines (2000 ed.), the threshold criteria states any proposed non-agricultural land use or development within one-half mile of property currently in or suitable for agricultural production is presumed to have some impact. However, no permanent structures are planned except for the expansion of an existing valve station by 16,000 square feet to 40,000 square feet. Temporary construction activities will include contracts with agricultural land owners to allow access. Mitigation measures will include a weed management plan and dust suppression measures. Therefore, the finding is **less than significant impacts.**

AGRICULTURAL COMMISSIONER'S OFFICE
STANDARD CONDITIONS OF APPROVAL

1. Where dust generating activity will occur within one-quarter mile (1,320 feet) of crop production, the grading or other activity must be halted during high wind events. High wind events are defined as winds of such velocity as to cause fugitive dust to blow from one property to another.

2. Construction areas within one-quarter mile of crop production shall be watered periodically to prevent the spread of dust onto nearby crops.

3. Excavations, pilings, or storages shall be treated periodically to prevent the spread of dust

L208-1 Continued

L208-1
Continued

L208-2

L208-2
Section 4.6.4 contains information on mitigation measure MM AIR-2b (Construction Fugitive Dust Plan)that incorporates the recommendations of the Agricultural Commissioner.

onto nearby crops. Treatments may include watering, application of soil stabilizers, roll compaction, or other appropriate measures.

L208-2 Continued

If you have any questions concerning these conditions, please contact Rita Graham (805) 933-8415 / rita.graham@ventura.org, Agricultural Commissioner's Office, County of Ventura.

L210

APR 0 6 2006

PUBLIC WORKS AGENCY
TRANSPORTATION DEPARTMENT
Traffic, Advance Planning & Permits Division
MEMORANDUM

DATE: April 4, 2006

TO: Resource Management Agency, Planning Division
Attention: Carl Morehouse

FROM: Nazir Lalani, Deputy Director NL

SUBJECT: Review of Document 04-095-1
Revised Draft Environmental Impact Report for the Cabrillo Port Liquefied Natural Gas (LNG) Deep Water Port. Floating storage and degasification unit moored 14 miles offshore of Ventura County in federal waters and delivered onshore via two 21.1 mile, 24" diameter natural gas pipeline laid on the ocean floor (OXB).
Applicant: BHP Billiton LNG International Inc.
300 Esplande, Suite 1800, Oxnard.
Lead Agencies: **The United States Coast Guard, Maritime Administration and the California State Lands Commission.**

The Public Works Agency -- Transportation Department has reviewed the subject Revised DEIR for the LNG Deepwater Port Project. The project is the construction of a floating storage and degasification unit moored 14 miles offshore of Ventura County in federal waters and delivered onshore via two 21.1 mile, 24" diameter natural gas pipeline laid on the ocean floor. These pipelines come on shore at Ormond Beach near Oxnard to connect to proposed new onshore pipelines to the existing southern California Gas Company intrastate pipelines system. The proposed 36" underground pipeline in Ventura County will be 14.3 miles long starting at a new metering station within the Reliant Energy Ormond Beach Generation Station and terminating at the Center Road Valve Station.

Major changes to the Project since the issuance of the October 2004 Draft EIS/EIR are the following:

- Due to design changes, several dimensions of the proposed FSRU are larger than previously proposed by the Applicant, including overall length (971 feet).
- The route of the offshore pipelines has been revised, following geotechnical analyses.
- Pipeline installation at shore crossing would use horizontal directional boring (HDB) instead of horizontal directional drilling (HDD).
- New onshore pipeline route segment near Center Road Station in Ventura County. The northern portion of the proposed Center Road pipeline route (beginning at approximately milepost (MP) 12.5 and continuing to Center Road Station) would be relocated further to the southeast and predominantly through agricultural lands to bypass Mesa Union School on Mesa School Road. The route it replaces (the proposed route in the October 2004 Draft EIS/EIR) is evaluated herein as Center Road Pipeline Alternative 3.

Most of the comments in our response to the DEIR dated November 30, 2004, have been included as part of the Draft SEIR. A condition for paying a Traffic Impact Mitigation Fee (TIMF) is included in Table 4.17-5. However, we would like to reiterate this condition for the payment of the TIMF.

Before the issuance of the encroachment permit, the applicant shall be required to pay to the County of Ventura a TIMF to mitigate the cumulative impact of this project on the County Regional Road Network. Based on the information provided, the fee due to the County is:

764 ADT* x $48.51/ ADT = **$37,061.64**

* 120 construction work force + 262 truck trips x 2 = 764 ADT

Before the issuance of the encroachment permit, the applicant shall also be required to pay to the City of Oxnard a TIMF based on the reciprocal agreement between the City of Oxnard and the County of Ventura. From the information provided, the fee due to the City will be:

764 ADT* x $30.58/ ADT = **$23,363.12**

The above estimated fee may be subject to adjustment at the time of deposit, due to provisions in the Traffic Impact Mitigation Ordinance allowing the fee to be adjusted for inflation based on the Engineering News Record (ENR) construction cost index. The above is an estimate only based on information provided in the draft environmental document.

The mitigation measures in the executive summary of the EIR should include the condition for paying the County and City TIMF. If the project cumulative impacts are not mitigated by payment of a TIMF, current General Plan policy will require County opposition to this project.

Our review of this project is limited to the impacts this project may have on the County's Regional Road Network.

Please call me at 654-2080 if you have any questions.

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L210-1

L210-1

The traffic impact mitigation fee is identified in an updated Table 4.17-5 as a potential condition precedent to obtaining an encroachment permit. As stated in Section 4.1.7, the transportation impact assessment in Section 4.17.4 assumes compliance with permit requirements; therefore, since the fee is listed on Table 4.17-5 as a requirement to obtain an encroachment permit from Ventura County, it is considered to be part of an existing permit requirement rather than mitigation.

L213

RESOURCE MANAGEMENT AGENCY

county of ventura

Planning Division
Christopher Stephens
Director

May 10, 2006

Dwight E. Sanders
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

FAX #: (916) 574-1810

SUBJECT: Cabrillo Port Liquefied Natural Gas Deepwater Port; Draft EIR

Thank you for the opportunity to review and comment on the above subject document. Attached are the comments that we have received resulting from an intra-county review of the projects. L213-1

Any responses to these comments should be sent directly to the commenter, with a copy to Carl Morehouse, Ventura County Planning Division, L#1740, 800 S. Victoria Avenue, Ventura, CA 93009.

If you have any questions regarding any of the comments, please contact the appropriate respondent. Overall questions may be directed to Carl Morehouse at (805) 654-2476.

Sincerely,

Post-it® Fax Note 7671	Date 5/10/06	# of pages ▶ 5
To D Sanders	From C Morehouse	
Co./Dept.	Co.	
Phone #	Phone #	
Fax # 916 574 1810	Fax #	

Christopher Stephens
County Planning Director

Attachment

County RMA Reference Number 04-095-1

2006/L213

L213-1
This is the cover letter for letters from Rita Graham, Ventura County Office of Agricultural Commissioner (L208); and Nazir Lalani, Ventura County Public Works Agency, Transportation Department (L210). See 2006 Comment Letters L208 and L210 for comments and accompanying responses.

L223

RESOURCE MANAGEMENT AGENCY

county of ventura

Planning Division
Christopher Stephens
Director

June 5, 2006

Dwight E. Sanders
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

FAX #: (916) 574-1810

SUBJECT: Cabrillo Port Liquefied Natural Gas Deepwater Port; Draft EIR

The attached revised comment letter was received by this department from the Ventura County Air Pollution Control District regarding the above subject document subsequent to those comments that we forwarded to you on May 10, 2006. L223-1

Any responses to these comments should be sent directly to the VCAPCD, with a copy to Carl Morehouse, Ventura County Planning Division, L#1740, 800 S. Victoria Avenue, Ventura, CA 93009.

If you have any questions regarding any of the comments, please contact the appropriate respondent. Overall questions may be directed to Carl Morehouse at (805) 654-2476.

Sincerely,

Christopher Stephens
County Planning Director

Attachment

County RMA Reference Number 04-095-1 Revised

800 South Victoria Avenue, L# 1740, Ventura, CA 93009 (805) 654-2481 Fax (805) 654-2509

2006/L223

L223-1
This is the cover letter for a letter from Michael Villegas, Ventura County Air Pollution Control District (L224). See 2006 Comment Letter L224 for comments and accompanying responses.